Traffic Quality on the Atlanta Regional Network

VOLUME TWO: ARTERIALS (2007/2008)

DRAFT REPORT

Prepared for
the Georgia Department of Transportation
by Skycomp, Inc. (Columbia, Maryland)

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TABLE OF CONTENTS

Arterial Network i

Introduction I

Part One- Performance Ratings 1

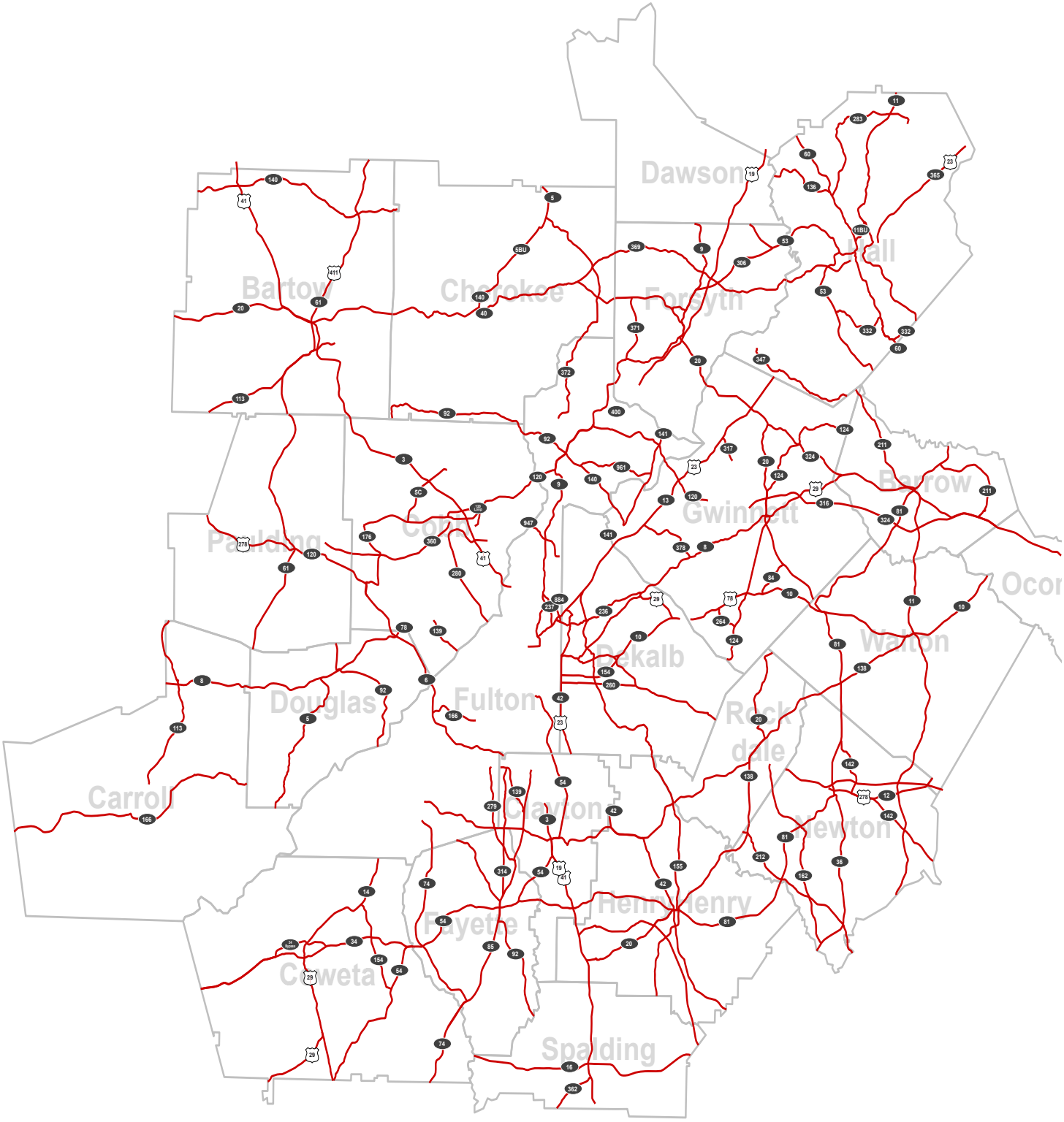
SR 3 (Clayton County) 4
SR 3/US 41 (Bartow & Cobb Counties) 6
SR 3/US 41 (Cobb County) 8
SR 5BU/Ball Ground Highway (Cherokee County) 12
SR 5 (Douglas County) 15
SR 6 (Cobb/Douglas & Fulton Counties) 18
SR 8 (Carroll & Douglas Counties) 22
SR 8 (Dekalb/Gwinnett & Barrow Counties) 26
SR 9 (Fulton & Forsyth Counties) 38
SR 9 (Fulton County) 42
SR 10 (Dekalb County 50
SR 10 (Gwinnett & Walton Counties) 54
SR 11 BU (Hall County) 56
SR 11 (Hall County) 58
SR 11 (Barrow/Walton & Newton Counties) 61
SR 12 (Dekalb County) 66
SR 12 (Newton County) 71
SR 13 (Gwinnett County) 74
SR 13 (Gwinnett/Dekalb & Fulton Counties) 78
SR 14 (Coweta County) 83
SR 16 (Spalding County) 86
US 19/41/SR 3 (Clayton/Henry & Spalding Counties) 88
SR 20 (Bartow & Cherokee Counties) 93
SR 20 (Cherokee & Forsyth Counties) 96
SR 20 (Forsyth & Gwinnett Counties) 100
SR 20 (Rockdale/Newton & Henry Counties) 104
SR 34 (Coweta County) 109
SR 34 Bypass (Coweta County) 112
SR 36 (Newton County) 114
SR 41 (Coweta County) 116
SR 42 (Fulton & Dekalb Counties) 118
SR 42 (Henry County) 122
SR 53 (Forsyth & Hall Counties) 126
SR 54 (Coweta/Fayette/Clayton & Fulton Counties) 130
SR 60 (Hall County) 138
SR 61 (Bartow & Paulding Counties) 142
SR 74 (Fulton/Fayette & Coweta Counties) 146
US 78 (Delkalb & Gwinnett Counties) 150

SR 81 (Henry County) 154
SR 81 (Barrow/Walton/Newton & Henry Counties) 158
SR 84 (Gwinnett County) 162
SR 85 (Clayton/Fayette & Coweta Counties) 164
SR 92/Highway 92 (Douglas County) 169
SR 92 (Fayette County) 172
SR 92 (Cherokee County) 174
SR 92 (Cherokee/Cobb & Fulton Counties) 178
SR 113 (Bartow County) 182
SR 113 (Carroll & Haralson Counties) 186
120 Loop/Marietta Parkway (Cobb County) 188
SR 120 (Cobb County) 192
SR 120 (Cobb & Fulton Counties) 196
SR 120 (Fulton County) 200
SR 120 (Fulton & Gwinnett Counties) 204
SR 124 (Gwinnett County) 208
SR 136 (Hall County) 212
SR 138 (Henry/Clayton & Fulton Counties) 214
SR 138 (Walton/Newton/Rockdale & Henry Counties) 218
SR 139 (Cobb County) 222
SR 139 (Clayton County) 224
SR 140 (Bartow County) 226
SR 140 (Fulton & Gwinnett Counties) 228
SR 141 (Fulton/Gwinnett & Dekalb Counties) 232
SR 142 (Newton County) 236
SR 154 (Coweta County) 238
SR 154 (Dekalb County) 240
SR 155 (Dekalb & Henry Counties) 242
SR 160 (Dekalb County) 250
SR 162 (Rockdale & Newton Counties) 252
SR 166 (Carroll County) 256
SR 166 (Fulton County) 258
SR 176 (Cobb County) 262
SR 211 (Barrow County) 264
SR 212 (Newton County) 266
SR 236 (Fulton & Dekalb Counties) 268
SR 237 (Fulton County) 273
SR 260 (Dekalb County) 276
SR 264 (Gwinnett County) 278
US 278 (Paulding & Cobb Counties) 280
SR 279 (Fulton & Fayette Counties) 284
SR 280 (Cobb County) 288
SR 283 (Hall County) 292

SR 306 (Forsyth County) 295
SR 314 (Clayton & Fayette Counties) 298
SR 316 (Gwinnett/Barrow & Oconee Counties) 300
SR 317 (Gwinnett County) 304
SR 324 (Gwinnett & Barrow Counties) 307
SR 332 (Hall County) 310
SR 347 (Hall & Gwinnett Counties) 312
SR 360 (Paulding & Cobb Counties) 314
SR 362 (Spalding County) 318
SR 365/US 23 (Hall County) 320
SR 369 (Cherokee/Forsyth & Hall Counties) 322
SR 371 (Forsyth County) 326
SR 372 (Cherokee & Fulton Counties) 328
SR 378 (Gwinnett County) 332
SR 400 (Forsyth/Dawson & Lumpkin Counties) 336
SR 884-Lenox Road (Fulton County) 340
SR 920 (Fayette/Clayton & Henry Counties) 342
SR 947- Johnson Ferry Rd/Glenridge Connector
(Cobb & Fulton Counties) 345
SR 961- Old Alabama Road (Fulton County) 348
Barrett Parkway/Ridgeway Rd (Cobb County) 352
Appendix A: Procedures for determining level-of-service A-1

ARTERIAL NETWORK

2007/2008



INTRODUCTION

The purpose of this aerial survey program is to rate the performance of the regional Atlanta highway system on a recurring basis, and to provide related data to regional planners, stakeholders, and decision-makers. This mobility monitoring program began in the fall of 1998, at which time approximately 500 centerline miles of limited-access and arterial highway in the Atlanta metropolitan area were surveyed (data collection occurred during both morning and evening peak commuter periods). Coverage was repeated three years later, in the fall of 2001, leading to an identification of locations experiencing both improved and degraded mobility.

The early success of this survey program resulted in decisions to expand coverage, ultimately to include a high percentage of the state highways in the 22-county Atlanta planning region. Accordingly, approximately 250 centerline miles of highway in the outlying counties were added in the spring of 2002, and an additional 1,500 miles of arterial highways were added in the spring of 2004. Aerial surveys of the first 750 miles of highway were repeated in 2005 and 2007. Coverage of the 1500 miles of arterial highways added in 2004 was repeated in the spring of 2008.

The aerial survey methodology takes advantage of the mobility and vantage point of fixed-wing aircraft, permitting data collection across a vast highway network that could not be affordably accomplished using traditional ground-based survey methods. During each survey period, up to eight aircraft at a time followed designated routes along the primary highways; each highway segment is photographed in its entirety approximately 24 times. Performance ratings derived from the photography are presented in this report in graphical format.

For the purpose of presentation in a logical format, the findings of the 2007 and 2008 survey iterations have been grouped into two volumes: *Volume One* presents all findings related to the freeway system; these were entirely derived from the fall 2007 survey flights. *Volume Two* presents all 2007 / 2008 findings related to signalized (interrupted-flow) arterial state highways.

FEATURES OF THE AERIAL SURVEY PROGRAM

During this aerial survey program, overlapping photographic coverage was obtained for each designated highway, repeated once an hour over four mornings and four evening commuter periods. The morning coverage time was 6:30-9:30 a.m., and the evening time was 4:00-7:00 p.m. Survey flights were conducted on weekdays, excluding Monday mornings, Friday evenings and mornings after holidays. Data were extracted from the aerial photographs to measure average recurring daily traffic conditions by link and by time period. Features of the aerial survey program include:

1) Report of findings: <u>Highway Performance Rating Tables, Volumes One and Two, 2007 / 2008</u>

Volume One presents performance-rating tables of 2007 traffic conditions on the region's freeway sub-system. The ratings are presented by highway, highway segment, direction, and time period. For these uninterrupted-flow facilities, the ratings are density-based level-of-service (LOS) designations "A", "B", "C", "D", "E" and "F", as defined in the 2000 Highway Capacity Manual. Details on how these level-of-service ratings were generated are provided in *Appendix A* of Volume One.

Volume Two presents performance-rating tables of traffic conditions on the backbone of the region's signalized arterial sub-system; some of these highways were surveyed in the fall of 2007 and the remainder were surveyed in the spring of 2008. For these interrupted-flow facilities, a surrogate level-of-service measure has been used, based on the size of vehicle platoons and the degree of queuing at signalized intersections. Details on how these surrogate level-of-service ratings were generated are also provided in *Appendix A* of Volume Two.

The performance rating tables in *Volume One* and *Volume Two* also contain arrowheads that depict locations of recurring congestion; narratives that clarify the severity and frequency of the congestion accompany each arrowhead. Where evident, apparent causes of the problems are also described.

2) Special Summary Report: Mobility Assessment and Bottleneck Changes, 2008 vs. 2005
The *Mobility Assessment and Bottleneck Changes Report* originally produced comparing 2005 with 2001 has been updated to compare 2007/08 with 2004/05. This special report summarizes the state of mobility on the network as of fall 2007 / spring 2008; and it highlights the specific bottleneck improvements and degradations that have been documented over the course of the survey program. This report presents extended "bottleneck" and "comparative" arrowhead maps that depict the location and typical extent of congested bottlenecks. "Before" and "after" highlight aerial photographs are also provided in many cases to illustrate major changes on the system.

3) Web-Based Module for the GDOT web site
The web-based product presents data collected from all 2,250 miles of surveyed highway; this product allows data queries from each of the surveyed years, and includes thousands of highlight aerial photographs of congestion found in the 21-county planning region. This product also contains detailed "bottleneck" and "comparative" arrowhead maps that highlight exactly where congestion was found on the system during each survey iteration. The product can be viewed over the internet for private or group use; the interactive feature allows a presenter to respond to audience interests by going to specific locations as appropriate. This product also supports digital downloads of all reports created over the course of this survey program. Lastly, a data extraction module allows users to create graphic displays and download performance rating tables based on user-selected filters.

4) Survey Database
A primary deliverable for this project is the *Survey Database*, built for the *Microsoft Access* ™ platform. This database contains all of the data collected from the aerial survey program, including vehicle counts and road segmentation, flight times and dates, and the highway segment measurements used to calculate freeway densities. Using this database, a number of reports can be displayed or printed, including day-by-day comparative reports, segment densities, and incident information.

5) Speed/Density Relationship on freeways
In order to allow the estimation of vehicle speeds from densities on the freeways, Skycomp has built a database from data collected in the Washington D.C. metropolitan area and other cities. This database demonstrates the relationship between traffic densities and speeds. From this database, a look-up table was developed relating the two variables. The result of Skycomp's work is provided in *Appendix B*.

DISCLAIMER
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QUESTIONS
If there are any questions about this survey program or the underlying methodology, please direct them to Greg Jordan at 410-884-6900.

Part One - Performance Ratings (ARTERIALS)

Performance Rating Tables, 2007/2008

This section of the report presents performance rating tables of 2007/2008 traffic conditions on the region's arterial sub-system. The ratings are presented by highway, highway segment, direction and time period. For clarification, these performance rating tables also contain arrowheads that depict the typical extent and location of recurring congestion. Details on how these level-of-service ratings were generated are provided in *Appendix A*.

Performance Rating Descriptions: ARTERIALS

For interrupted-flow facilities, a surrogate level-of-service measure has been used. Developed by Skycomp for use with overlapping aerial photographs, this surrogate measure is based on platoon sizes and queuing characteristics at signalized intersections. Because this is a surrogate LOS measure, the letters "A" through "F" have been underlined to identify them as surrogate LOS measures. A summary of the surrogate level-of-service is provided below (a more detailed discussion is provided in Appendix A).

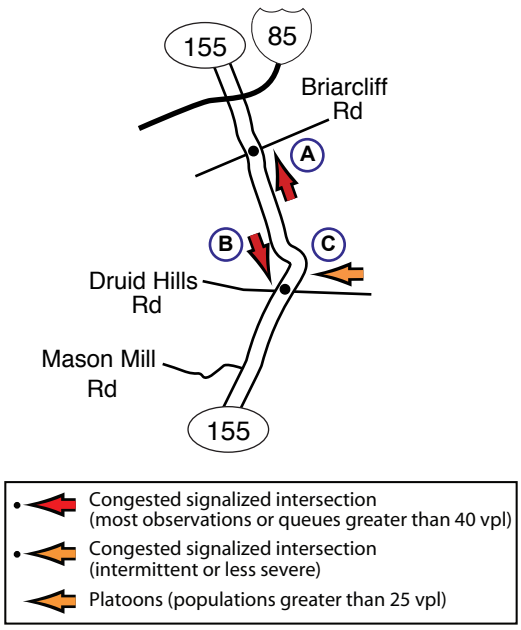
Signalized Arterial Highways:

Traffic Condition	Very Light	Light	Moderate	Heavy	Congested	Severe
Performance Rating (surrogate LOS)	A	B	C	D	E	F

Bottleneck Graphics and Analytical Notes

Each performance rating table includes arrowheads that depict locations where congestion was found; notes that clarify the frequency and severity of the congestion accompany each arrowhead. Examples from the report are provided below.

Signalized Arterial Highways



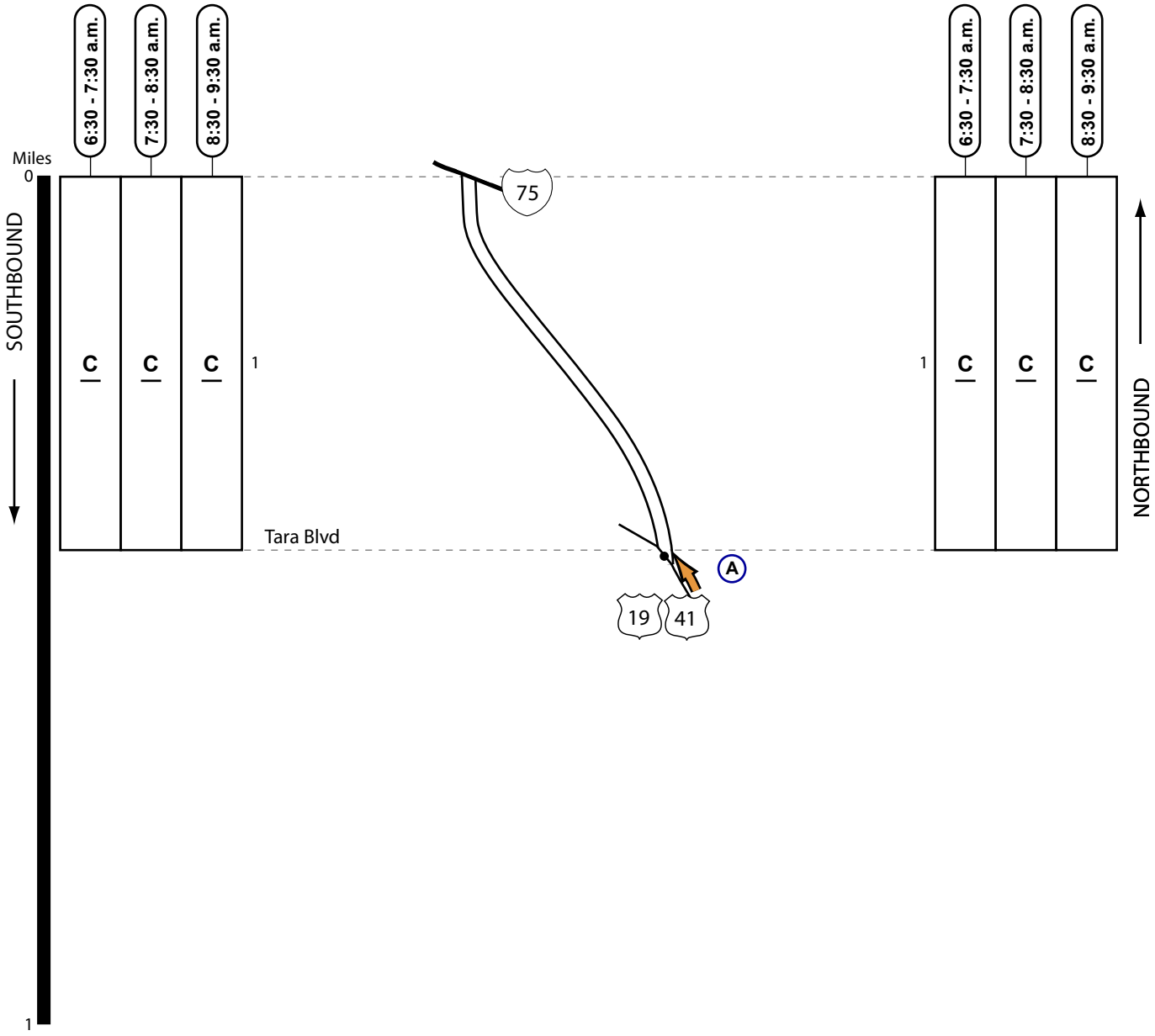
A
Congestion Type: Mainline Signal Queue
Location: Briarcliff Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Druid Hills Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

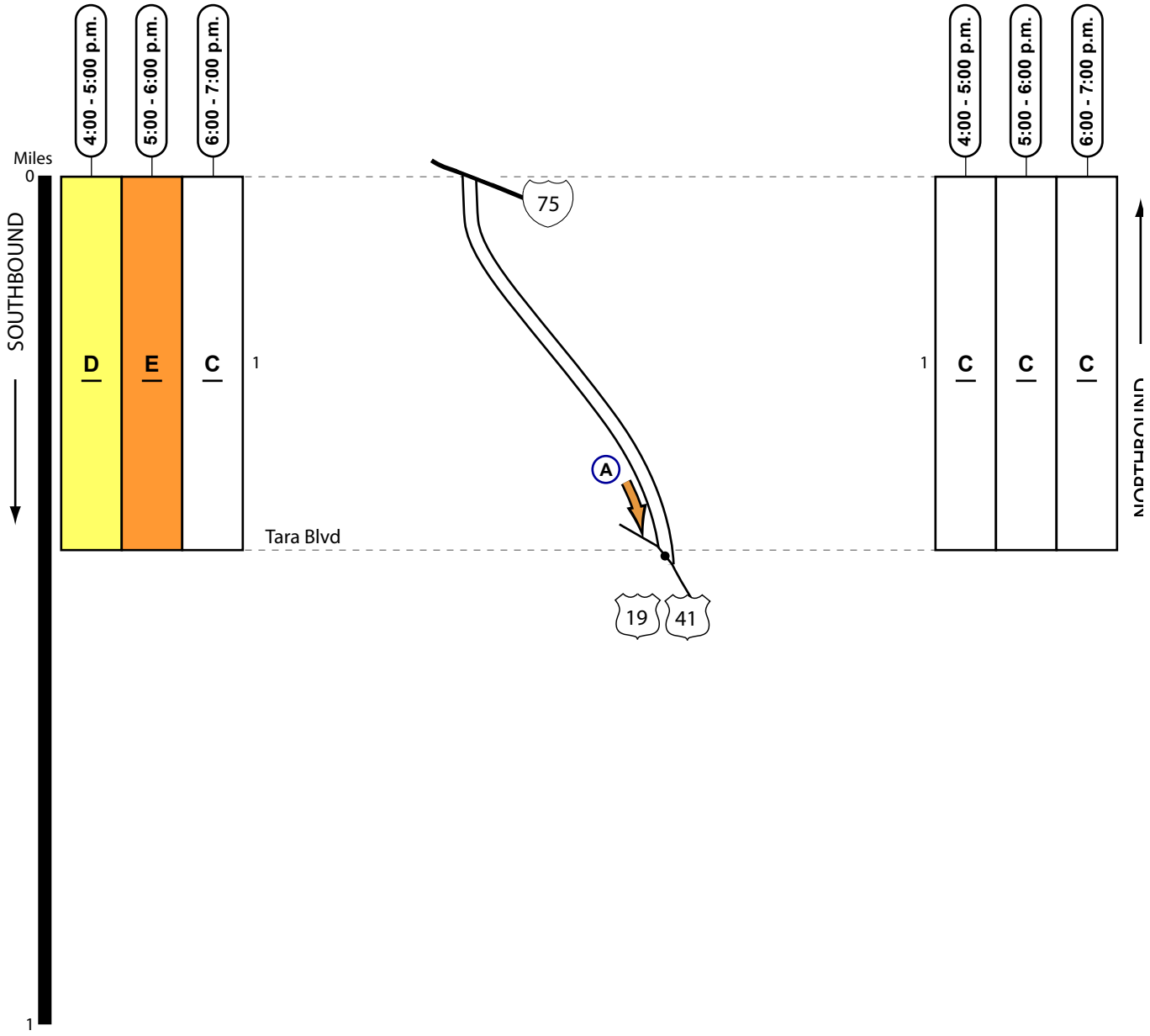
Spring 2008

SR 3 (Clayton County) - Morning



A
Congestion Type: Cross Road Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 3
(per 2007 data/analysis)

Spring 2008
SR 3 (Clayton County) - Evening

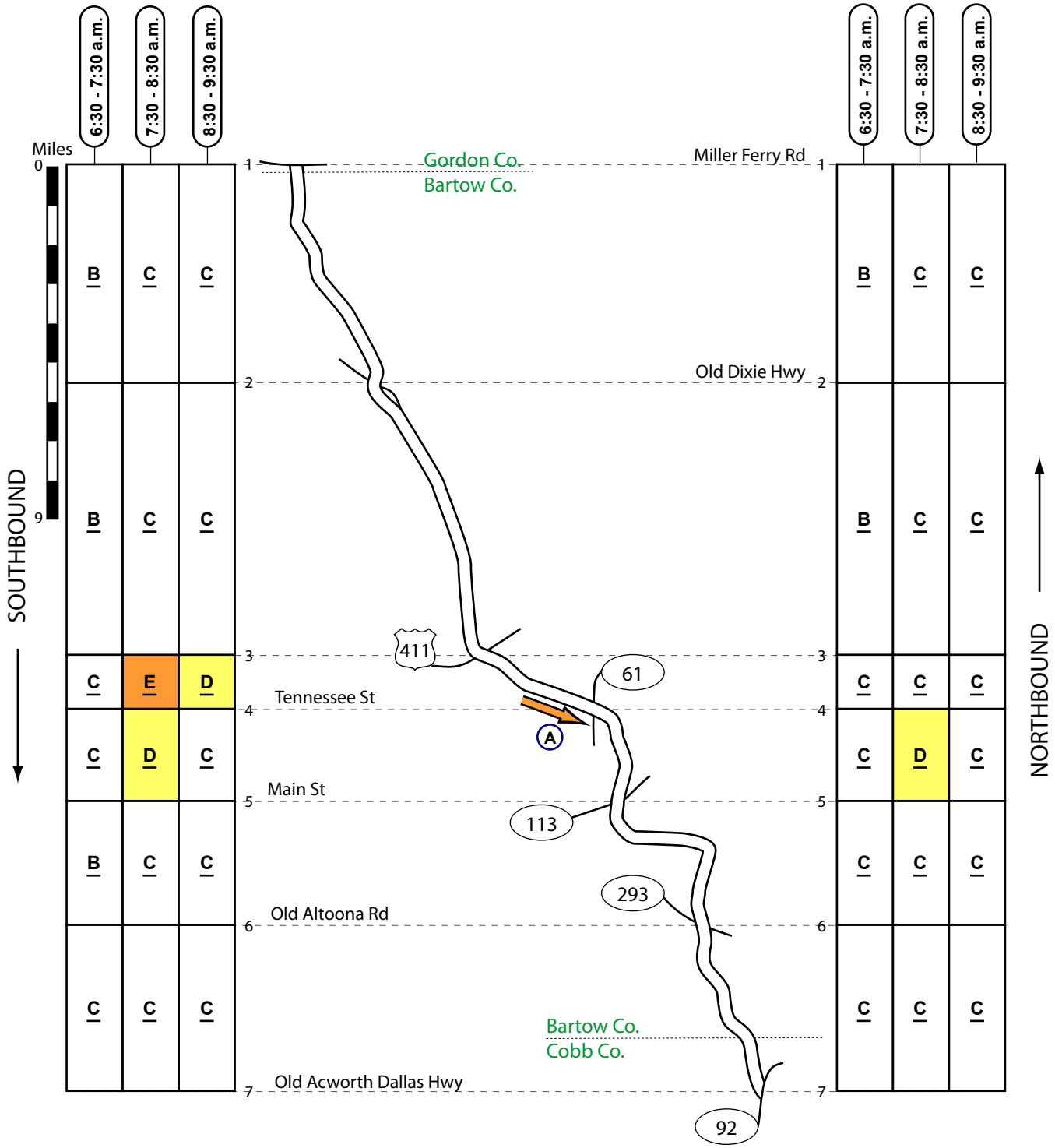


A
Congestion Type: Mainline Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 3/US 41 (Bartow & Cobb Counties) - Morning

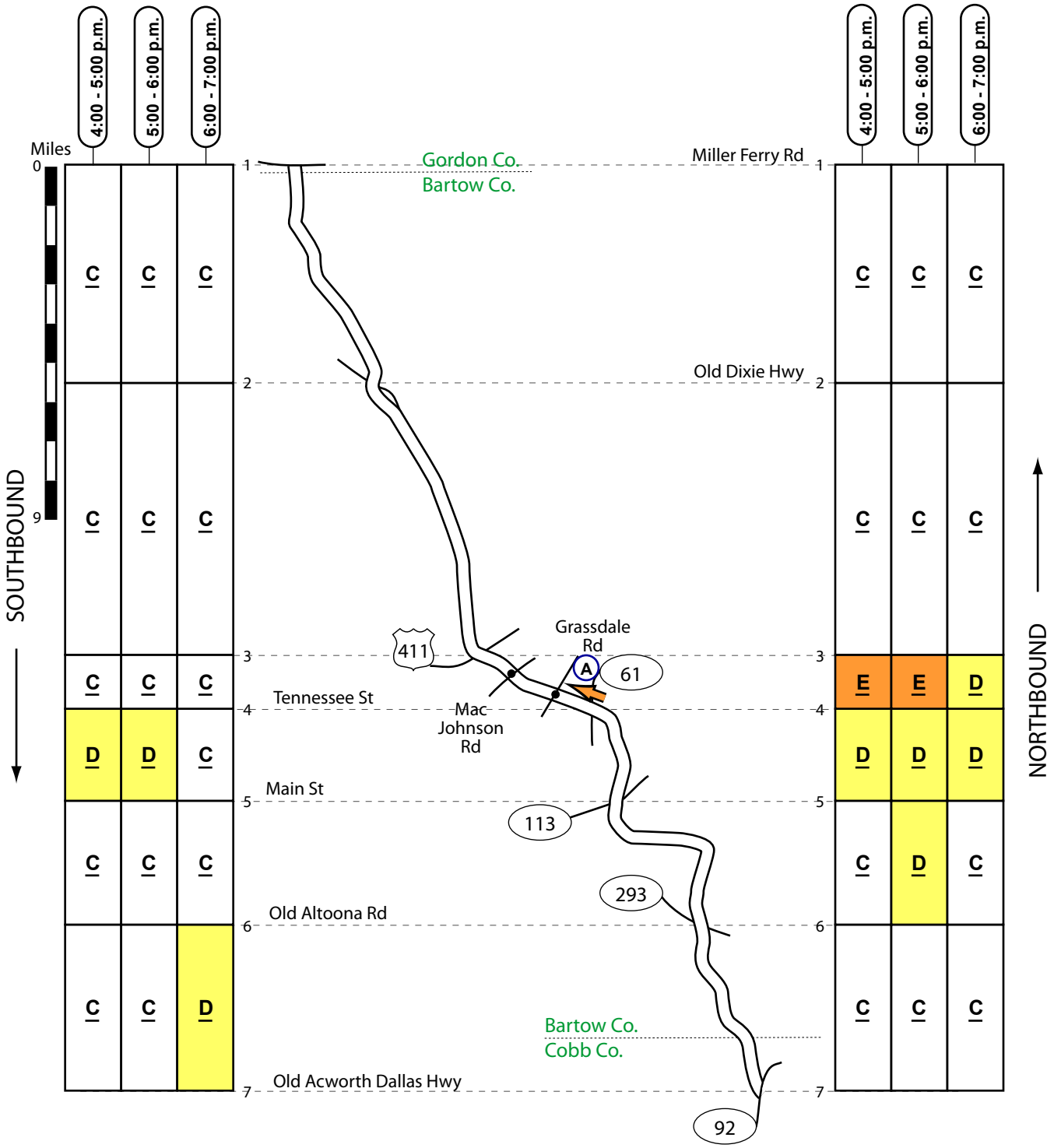


A
Congestion Type: Platoons
Location: Between US 411 & SR 61
Frequency: Intermittent
Direction: Southbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 3/US 41 (Bartow & Cobb Counties) - Evening

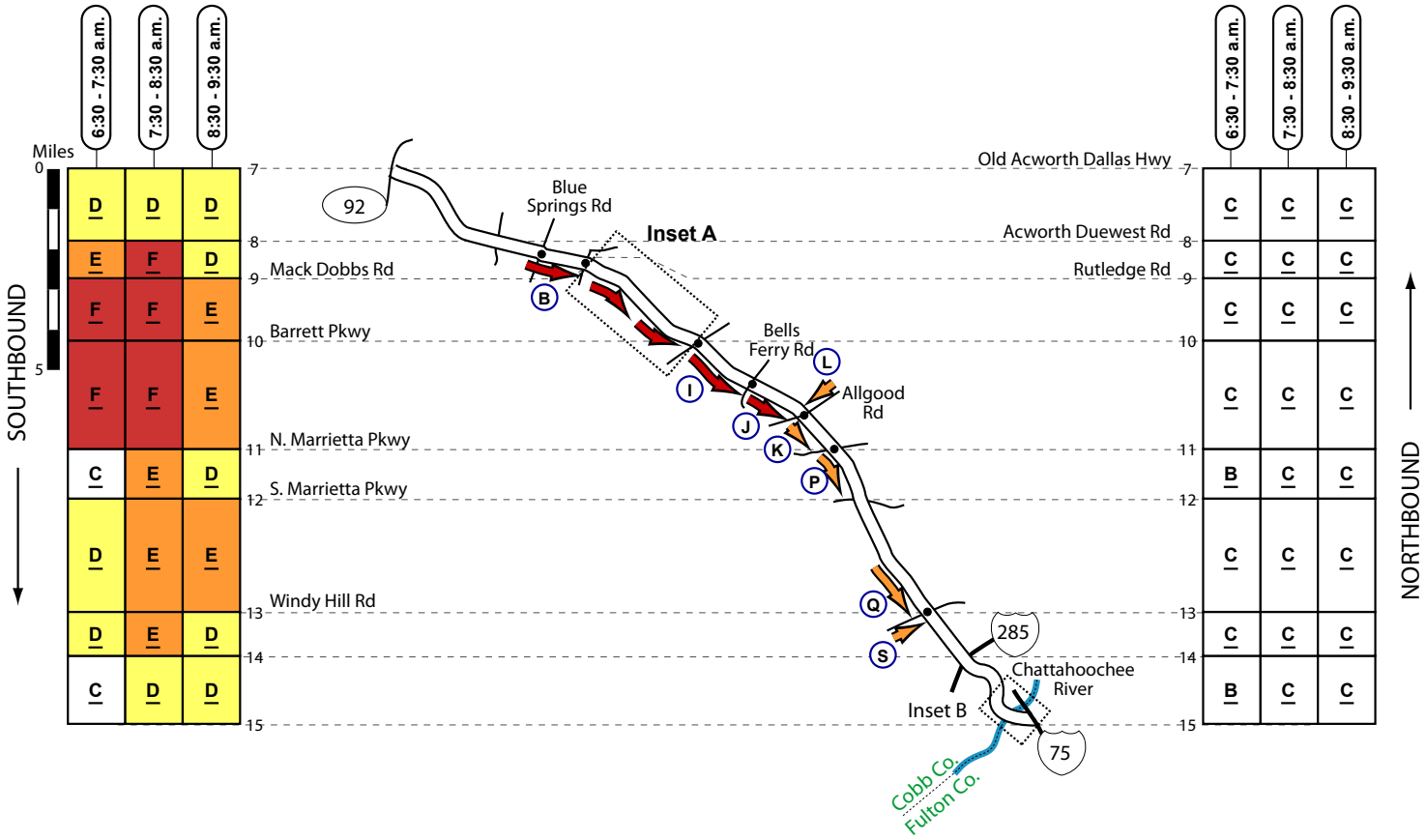


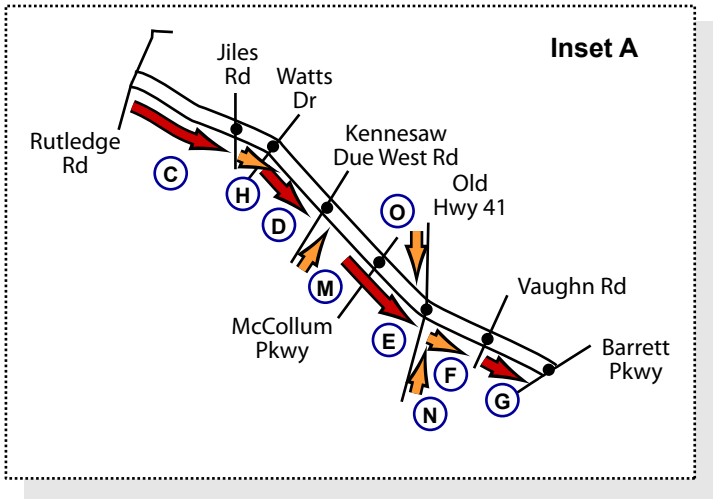
A
Congestion Type: Signal Queue
Location: Grassdale Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: During the 2005 survey, roadwork at Grassdale Rd may have exacerbated congestion (northbound congestion found in 2005 was more severe than congestion found in 2007).

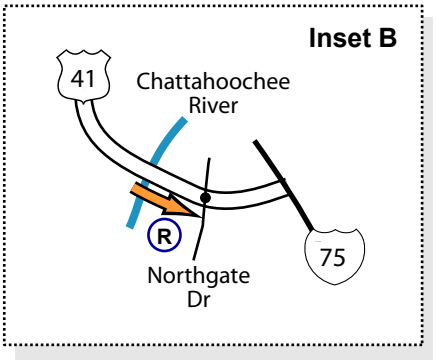
Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 3/US 41 (Cobb County) - Morning







Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 3/US 41 (Cobb County) - Morning

B
Congestion Type: Signal Queue
Location: Rutledge Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 65 vpl
Number of Lanes: 2
Note: During several observations, congestion extended back through the upstream signal at Blue Springs Rd.

C
Congestion Type: Signal Queue
Location: Jiles Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 80 vpl
Number of Lanes: 2

D
Congestion Type: Signal Queue
Location: Kennesaw Due West Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: Old Hwy 41
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2
Note: During several observations, congestion extended back through the upstream signal at McCollum Pkwy

F
Congestion Type: Signal Queue
Location: Vaughn Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Barrett Pkwy
Frequency: Most observations before 8:00 a.m.
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

N
Congestion Type: Congested Cross Road
Location: Old Hwy 41
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

O
Congestion Type: Congested Cross Road
Location: Old Hwy 41
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

P
Congestion Type: Platoons
Location: Between N. Marietta Pkwy & S. Marietta Pkwy
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

Q
Congestion Type: Signal Queue
Location: Windy Hill Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: During one of the morning survey flights, congestion approaching Windy Hill Rd was significantly worse than the other mornings (queue populations 40 to 50 vehicles per lane).

R
Congestion Type: Signal Queue
Location: Northgate Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

S
Congestion Type: Congested Cross Road
Location: Windy Hill Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Watts Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Signal Queue
Location: Bells Ferry Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 70 vpl
Number of Lanes: 2

J
Congestion Type: Signal Queue
Location: Allgood Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2

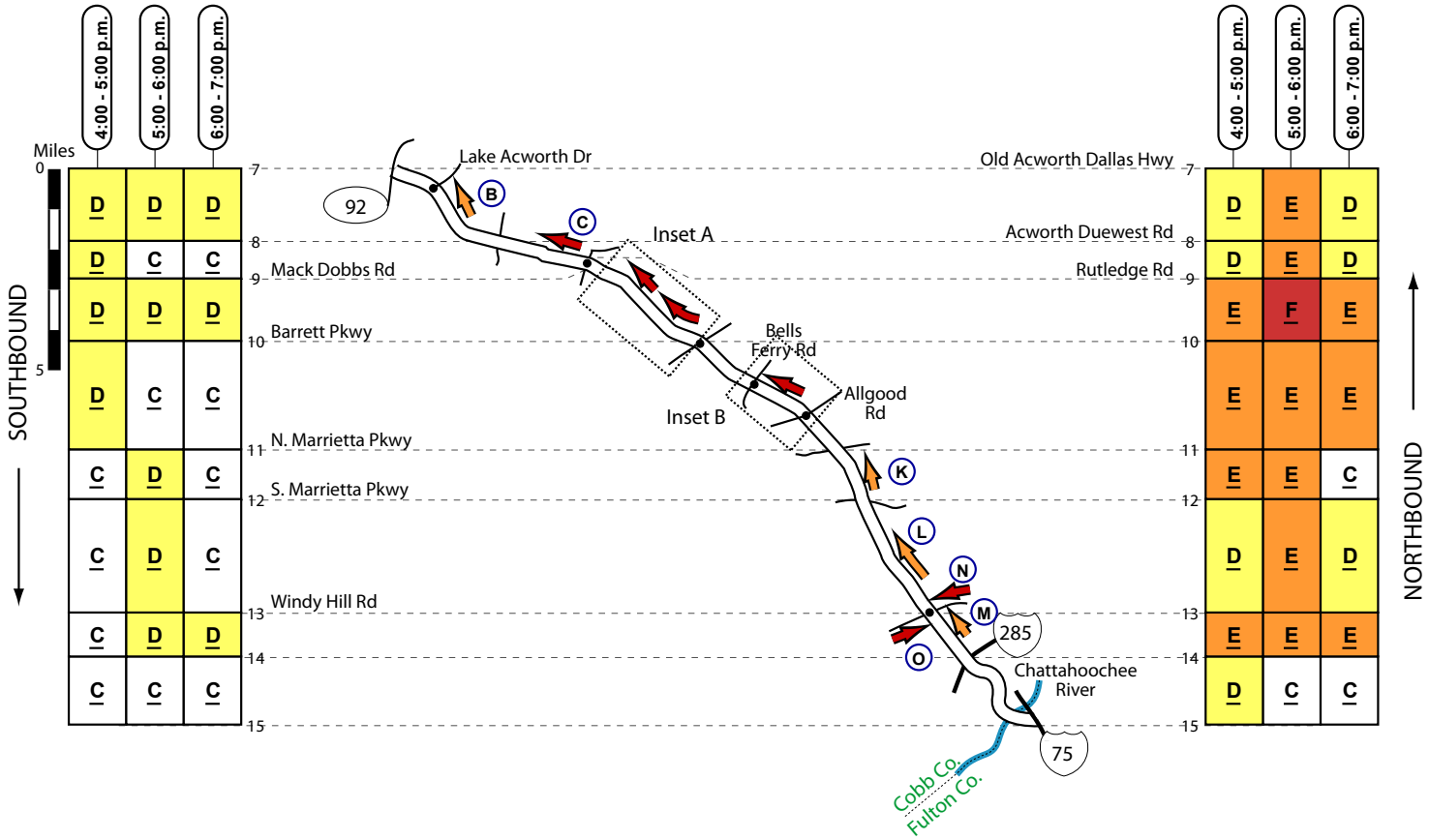
K
Congestion Type: Signal Queue
Location: N. Marietta Pkwy
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: During several observations, congestion extended back through the upstream signal at White Circle.

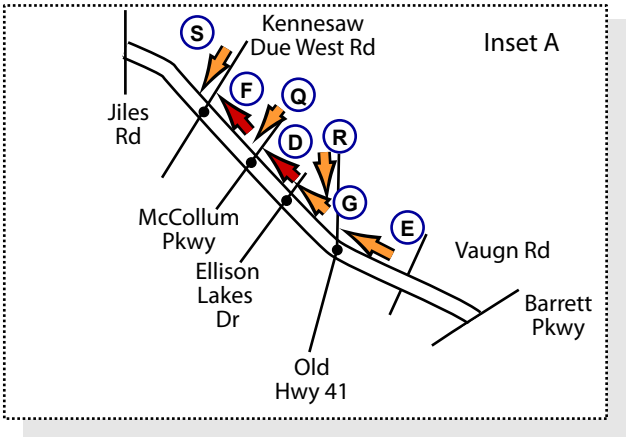
L
Congestion Type: Congested Cross Road
Location: Allgood Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1

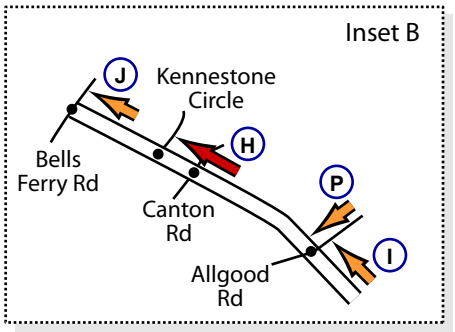
M
Congestion Type: Congested Cross Road
Location: Kennesaw Due West Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

Fall 2007

SR 3/US 41 (Cobb County) - Evening







Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 3/US 41 (Cobb County) - Evening

B
Congestion Type: Signal Queue
Location: Lake Acworth Dr
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Platoons
Location: Between Rutledge Rd & Acworth
Due West Rd
Frequency: Peak Hour
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

D
Congestion Type: Signal Queue
Location: McCollum Pkwy
Frequency: Most observations
Direction: Northbound
Queue Populations: 30 to 60 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: Old Hwy 41
Frequency: Intermittent
Direction: Northbound
Queue Populations: 35 to 45 vpl
Number of Lanes: 2

F
Congestion Type: Signal Queue
Location: Kennesaw Due West Rd
Frequency: Most Observations
Direction: Northbound
Queue Populations: 25 to 40 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Ellison Lakes Dr
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Kennestone Circle
Frequency: Most observations
Direction: Northbound
Queue Populations: 30 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion extended back through the upstream signal at Canton Rd.

O
Congestion Type: Congested Cross Road
Location: Windy Hill Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: Eastbound congestion was also found in the two left turn lanes at the signal; this queue sometimes extended back into the mainline on Windy Hill Rd.

P
Congestion Type: Congested Cross Road
Location: Allgood Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

Q
Congestion Type: Congested Cross Road
Location: McCollum Pkwy
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1
Note: During some observations, congestion backed through the upstream signal at Old Hwy 41 (SR 293).

R
Congestion Type: Congested Cross Road
Location: Old Hwy 41
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1

S
Congestion Type: Congested Cross Road
Location: Kennesaw Due West Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

I
Congestion Type: Signal Queue
Location: Allgood Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Signal Queue
Location: Bells Ferry Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

K
Congestion Type: Platoons
Location: Between S. Marrietta Pkwy & N. Marrietta Pkwy
Frequency: Most observations
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

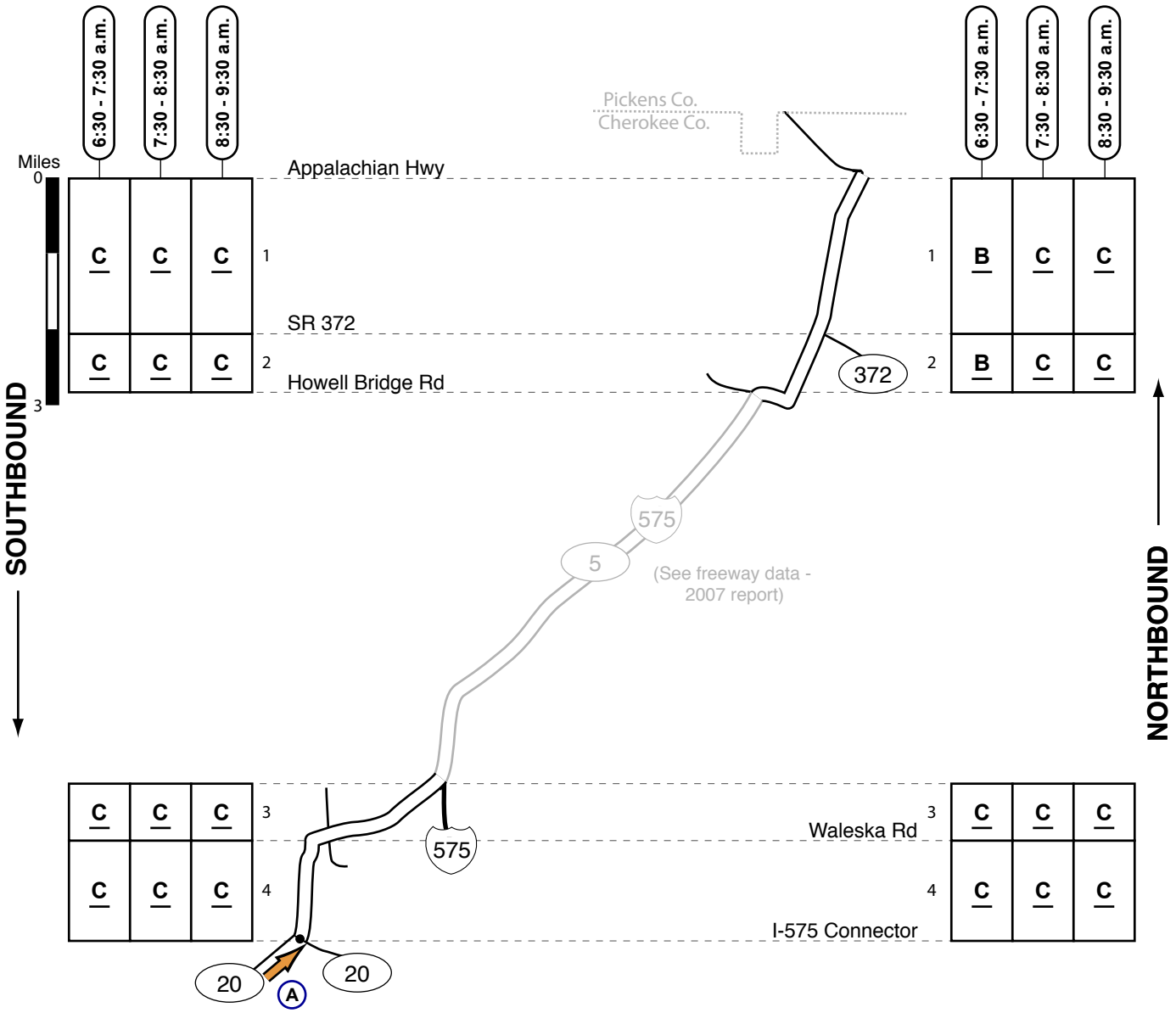
L
Congestion Type: Platoons
Location: Between Windy Hill Rd & S. Marrietta Pkwy
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

M
Congestion Type: Signal Queue
Location: Windy Hill Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2
Note: During one observation, approximately 50 vehicles per lane were queued at the signal.

N
Congestion Type: Congested Cross Road
Location: Windy Hill Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2

Spring 2008

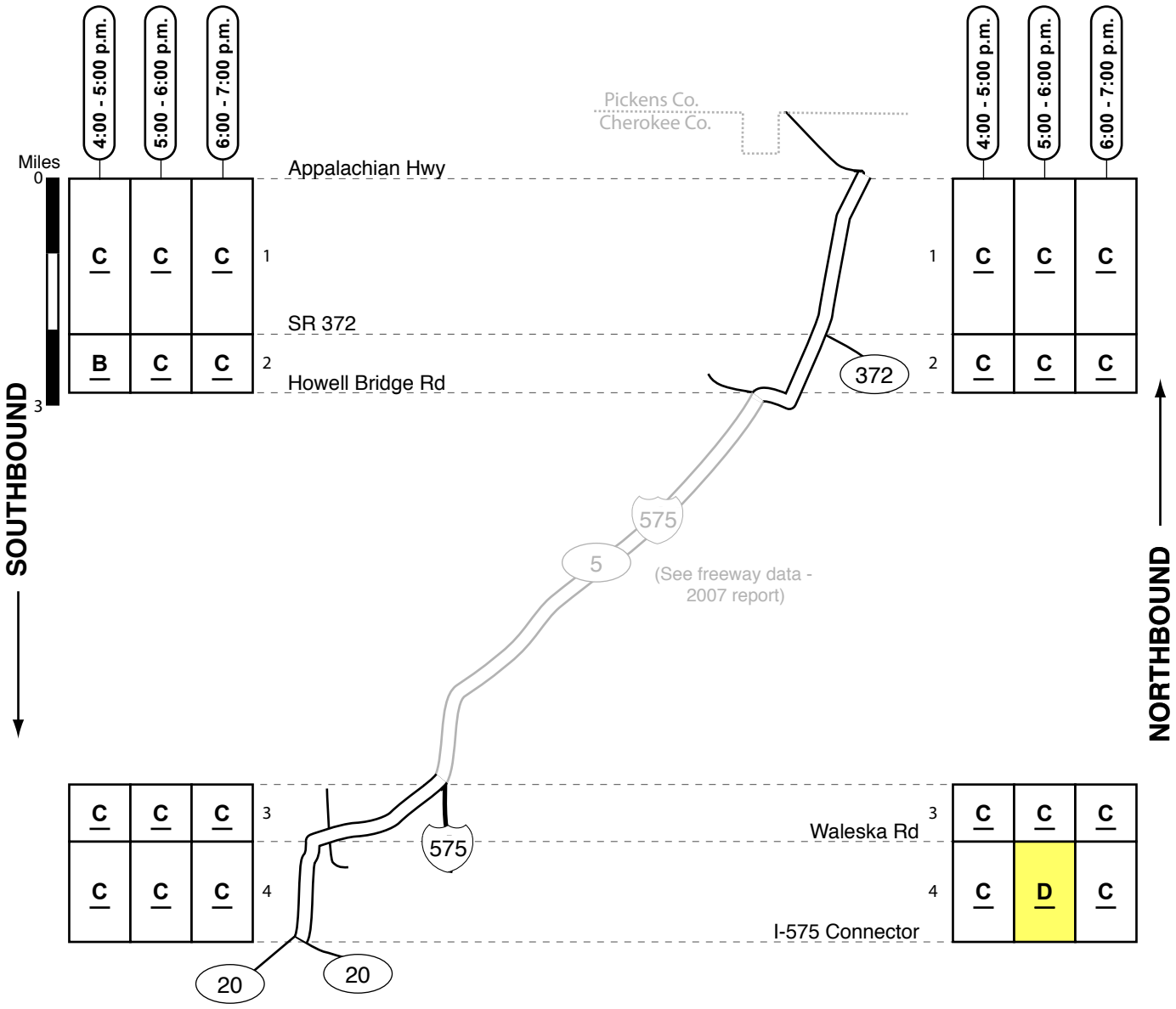
SR 5BU/Ball Ground Highway (Cherokee County) - Morning



A
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

Spring 2008

SR 5BU/Ball Ground Highway (Cherokee County) - Evening

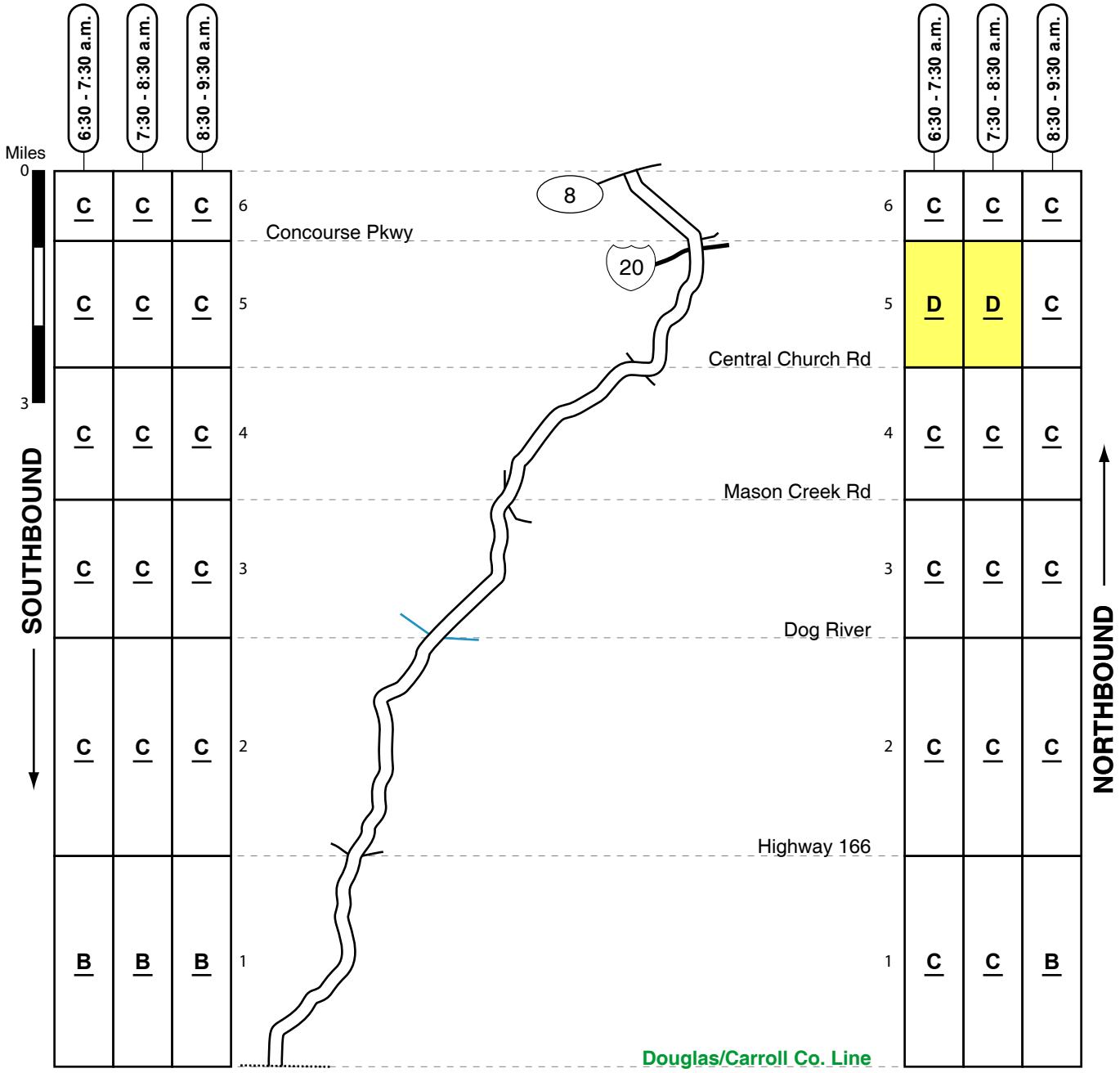


Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

(Blank)

Spring 2008

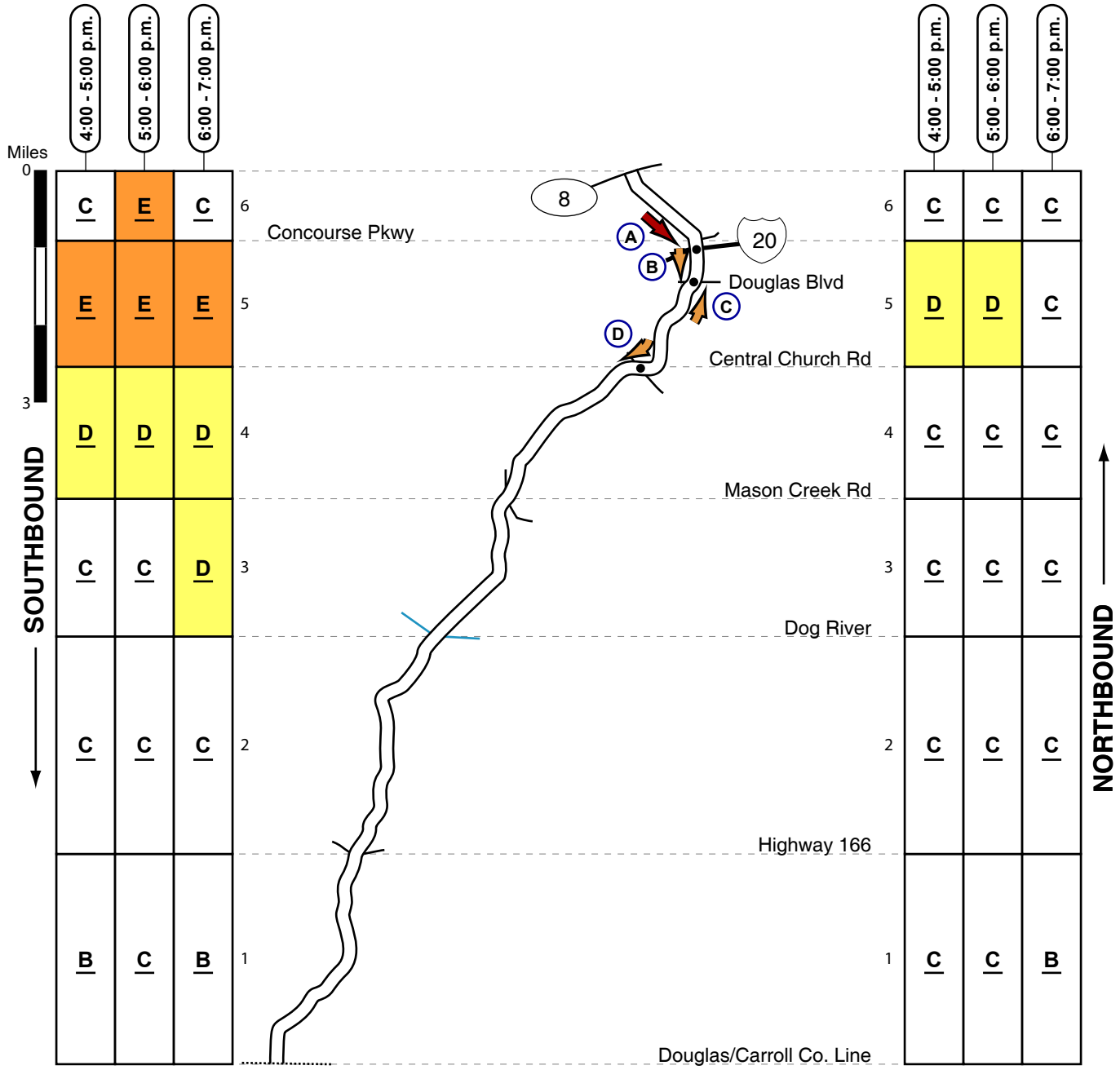
SR 5 (Douglas County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 5 (Douglas County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 5 (Douglas County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion extended back through the upstream signal at Concourse Parkway.

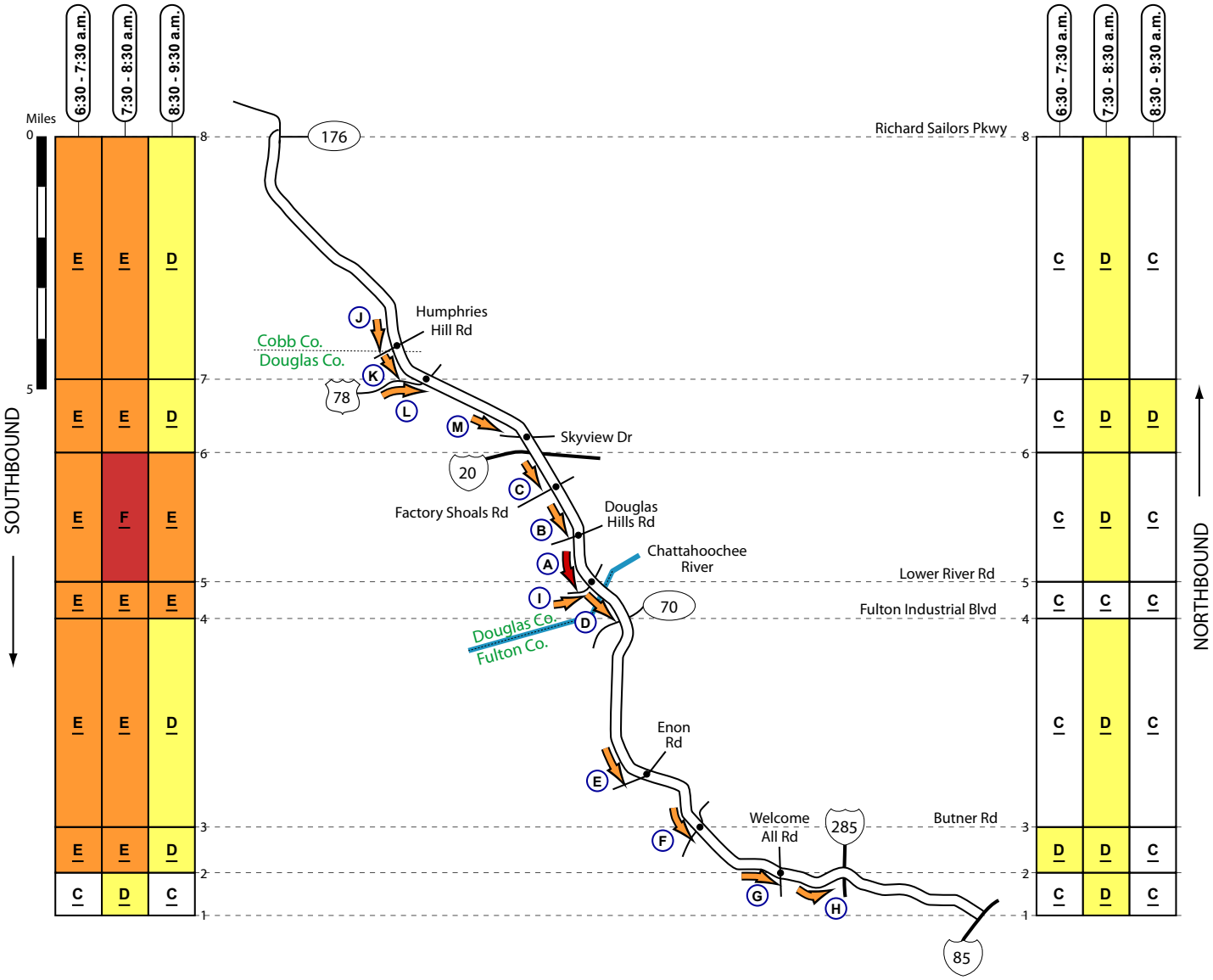
B
Congestion Type: Mainline Signal Queue
Location: Douglas Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue/ Platoons
Location: Douglas Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: Central Church Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Fall 2007

SR 6 (Cobb/Douglas & Fulton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 6 (Cobb/Douglas & Fulton Counties) - Morning

A
Congestion Type: Signal Queue
Location: Lower River Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2
Note: During some observations, congestion at Lower River Rd extended back through the upstream signal at Douglas Hills Rd.

B
Congestion Type: Signal Queue
Location: Douglas Hills Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: Southbound congestion at Douglas Hill Rd appeared to be caused by downstream congestion backing through the signal; the head of the queue was found at the signal at Lower River Rd.

C
Congestion Type: Signal Queue
Location: Factory Shoals Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

D
Congestion Type: Platoons
Location: Between Lower River Rd & SR 70
Frequency: Most observations
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: Enon Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

F
Congestion Type: Signal Queue
Location: Butner Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Welcome All Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Platoons
Location: Between Welcome All Rd & I-285
Frequency: Intermittent
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

I
Congestion Type: Congested Cross Road
Location: Lower River Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

J
Congestion Type: Signal Queue
Location: Humphries Hill Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

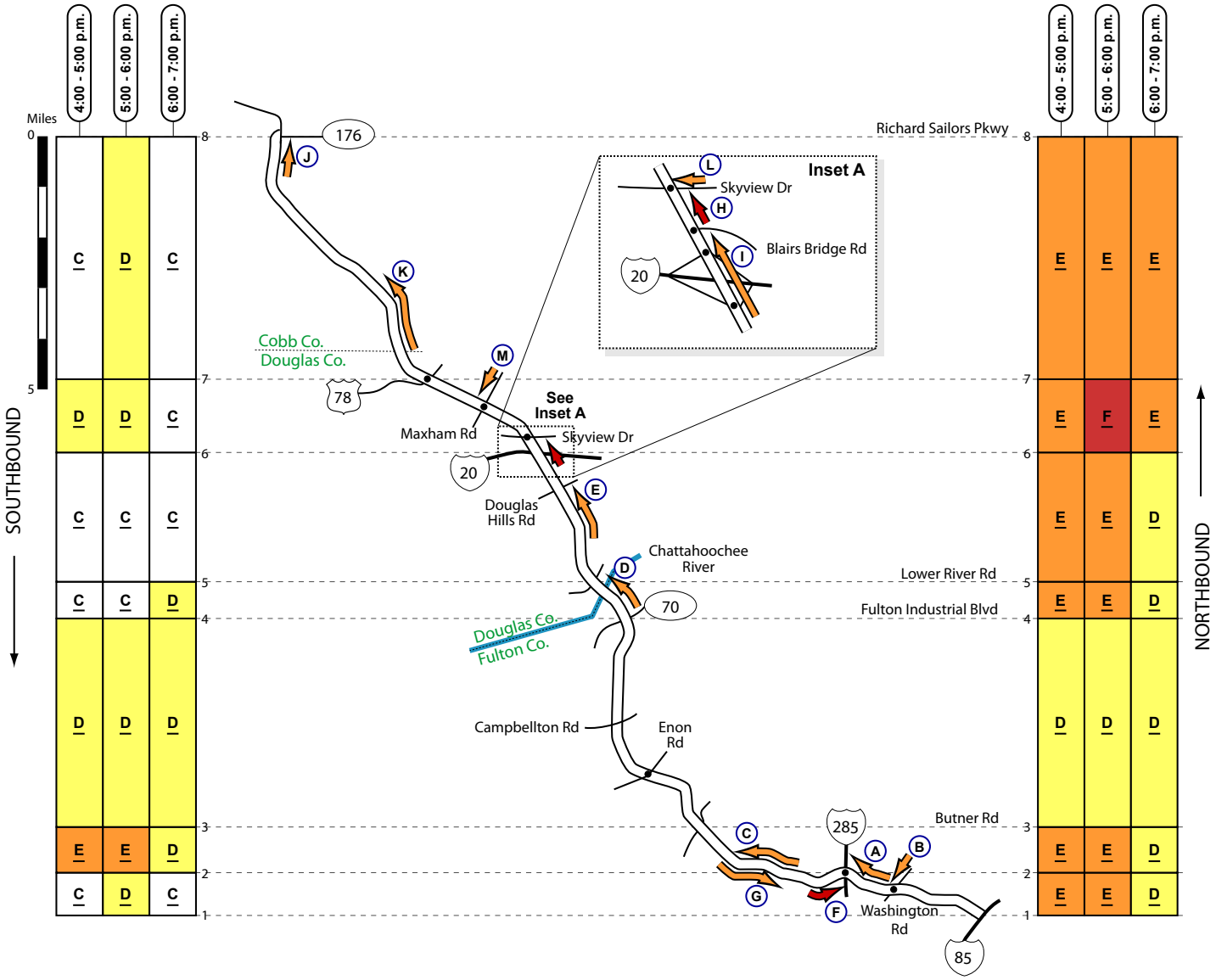
K
Congestion Type: Signal Queue
Location: US 78
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: During several observations on one of the morning surveys, extensive southbound congestion was found on SR 6 approaching the signals at Westside Hwy and US 78; queue populations ranged from approximately 60 to 80 vehicles per lane (two lanes).

L
Congestion Type: Congested Cross Road
Location: US 78
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

M
Congestion Type: Signal Queue
Location: Skyview Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3
Note: During one observation on one of the morning surveys, southbound congestion approaching the signal at Skyview Dr extended all the way back through the upstream signal at Corporate Ct; the entire queue contained approximately 80 vehciles per lane (three lanes).

Fall 2007

SR 6 (Cobb/Douglas & Fulton Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 6 (Cobb/Douglas & Fulton Counties) - Evening

A
Congestion Type: Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Congested Cross Road
Location: Washington Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Platoons
Location: Between I-285 & Butner Rd
Frequency: Most observations
Direction: Northbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Platoons
Location: Between SR 70 and Lower River Rd
Frequency: Most observations
Direction: Northbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Platoons
Location: Between Lower River Rd & I-20
Frequency: Most observations
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

F
Congestion Type: Signal Queue
Location: I-285
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left lane on SR 6 approaching the signal at the I-285 northbound entrance ramp; congestion typically extended back through the upstream signal at the I-285 southbound ramps.

G
Congestion Type: Platoons
Location: Between Butner Rd & I-285
Frequency: Intermittent
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Skyview Dr
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 3
Note: During one of the evening surveys, northbound congestion at Skyveiw Dr extended back through the upstream signals at Blairs Bridge Rd and I-20.

I
Congestion Type: Signal Queue
Location: Blairs Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 3
Note: During some observations, northbound congestion at Blairs Bridge Rd extended back through the upstream signals at the I-20 ramps.

J
Congestion Type: Signal Queue
Location: SR 176
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

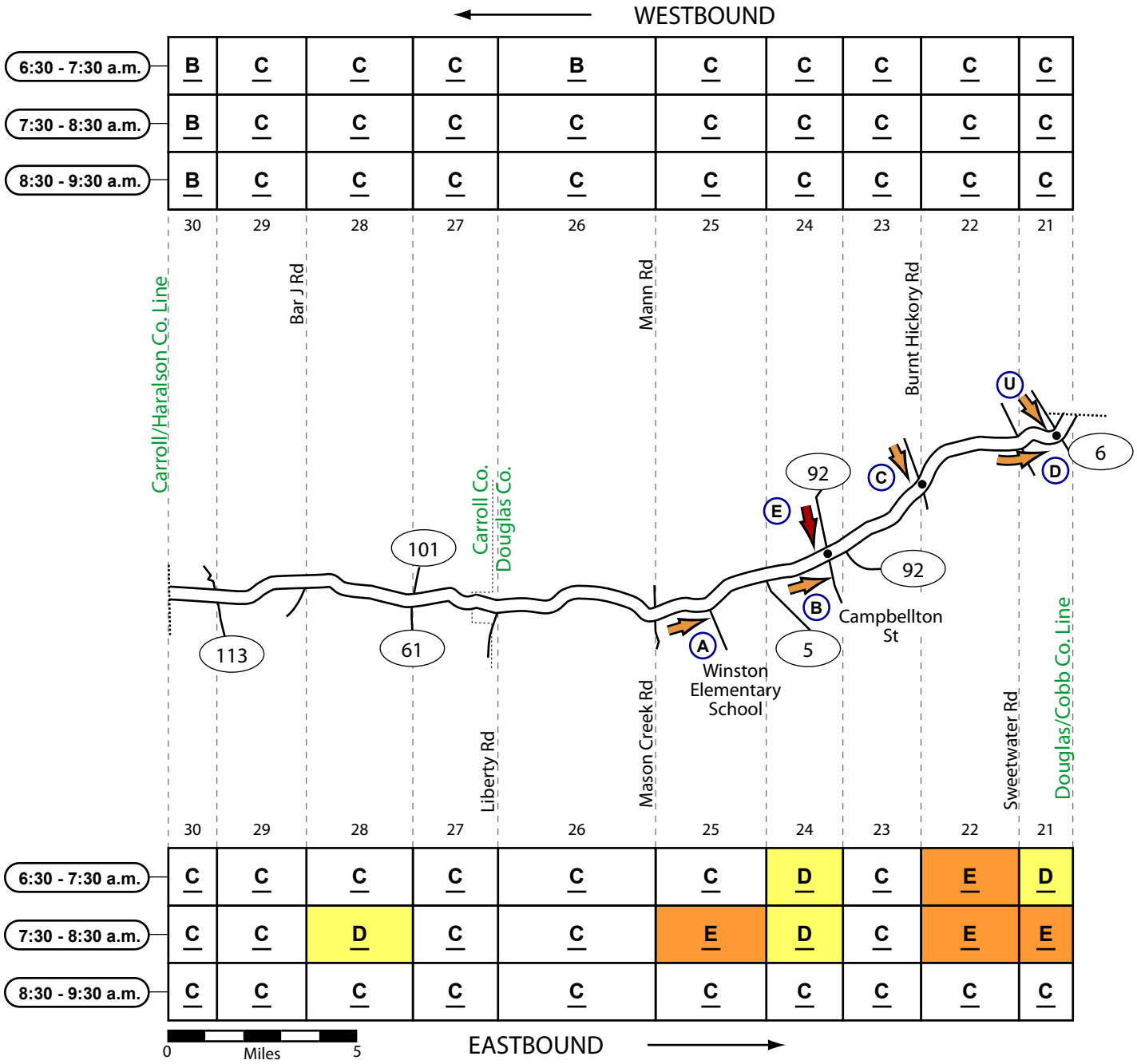
K
Congestion Type: Platoons
Location: Between US 78 & SR 176
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 40 vpl
Number of Lanes: 2

L
Congestion Type: Congested Cross Road
Location: Skyview Dr
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

M
Congestion Type: Congested Cross Road
Location: Maxham Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 3

Spring 2008

SR 8 (Carroll & Douglas Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Carroll & Douglas Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Winston Elementary School
Frequency: Between 7:30 and 8:00
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Campbellton St/SR 92
Frequency: One time only
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Signal Queue
Location: Burnt Hickory Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

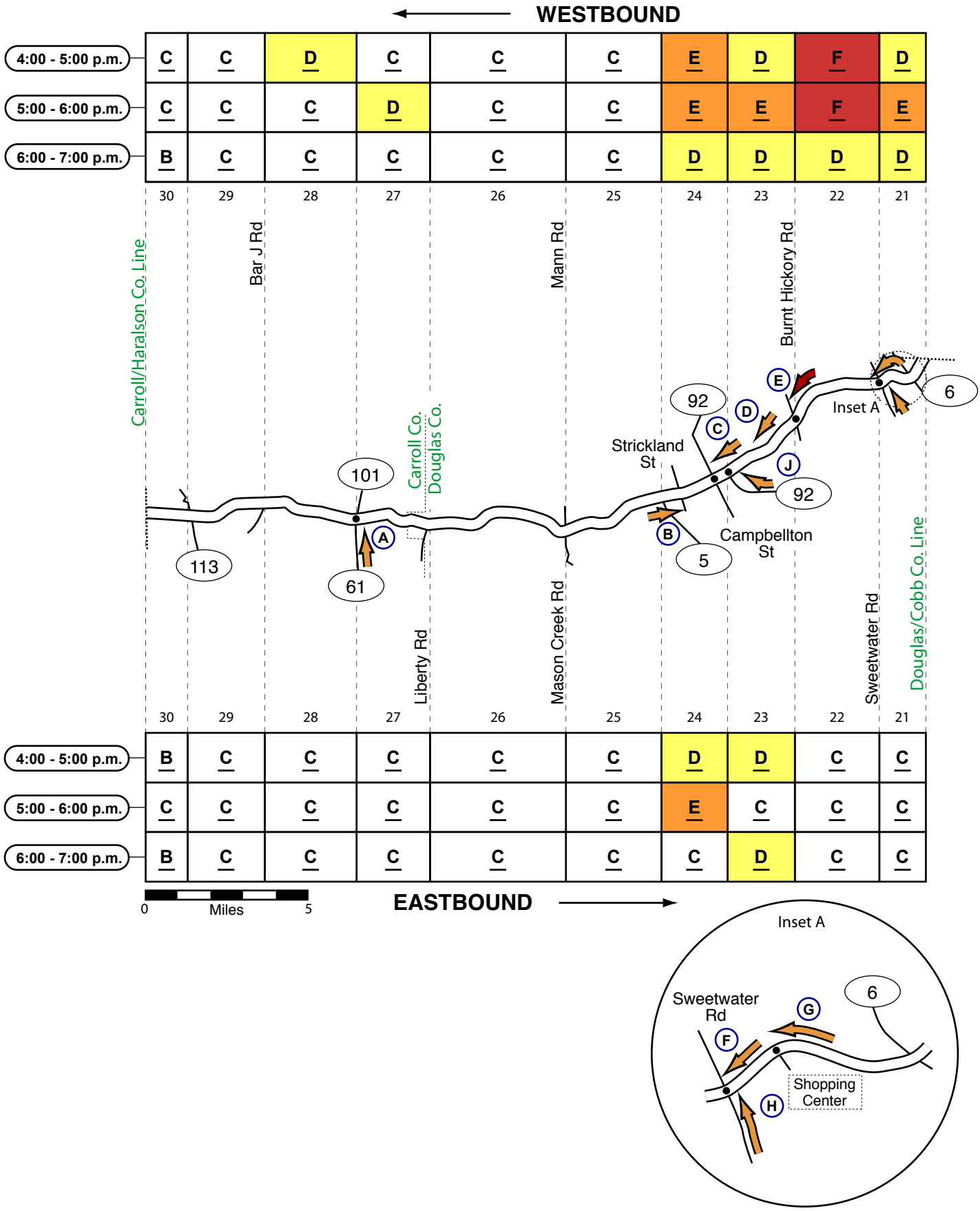
D
Congestion Type: Platoons
Location: Vicinity of Sweetwater Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 30 to 35 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

U
Congestion Type: Cross Road Signal Queue
Location: SR 6
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: During several observations on one of the morning surveys, extensive southbound congestion was found on SR 6 approaching the signals at Westside Hwy and US 78; queue populations ranged from approximately 60 to 80 vehicles per lane (two lanes).
(per 2007 data/analysis)

Spring 2008

SR 8 (Carroll & Douglas Counties) - Evening



	30	29	28	27	26	25	24	23	22	21
4:00 - 5:00 p.m.	C	C	D	C	C	C	E	D	F	D
5:00 - 6:00 p.m.	C	C	C	D	C	C	E	E	F	E
6:00 - 7:00 p.m.	B	C	C	C	C	C	D	D	D	D

	30	29	28	27	26	25	24	23	22	21
4:00 - 5:00 p.m.	B	C	C	C	C	C	D	D	C	C
5:00 - 6:00 p.m.	C	C	C	C	C	C	E	C	C	C
6:00 - 7:00 p.m.	B	C	C	C	C	C	C	D	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Carroll & Douglas Counties) - Evening

A
Congestion Type: Cross Road Signal Queue
Location: SR 61
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Left-Turn Queue (No Traffic Signal)
Location: Strickland St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: The absence of a left-turn bay appeared to exacerbate the congestion; thru-traffic on SR 8 was not able to bypass left-turning vehicles at Strickland St.

C
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between Burnt Hickory Rd & SR 92
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd
Frequency: Most observations before 6:00 p.m.
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Sweetwater Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

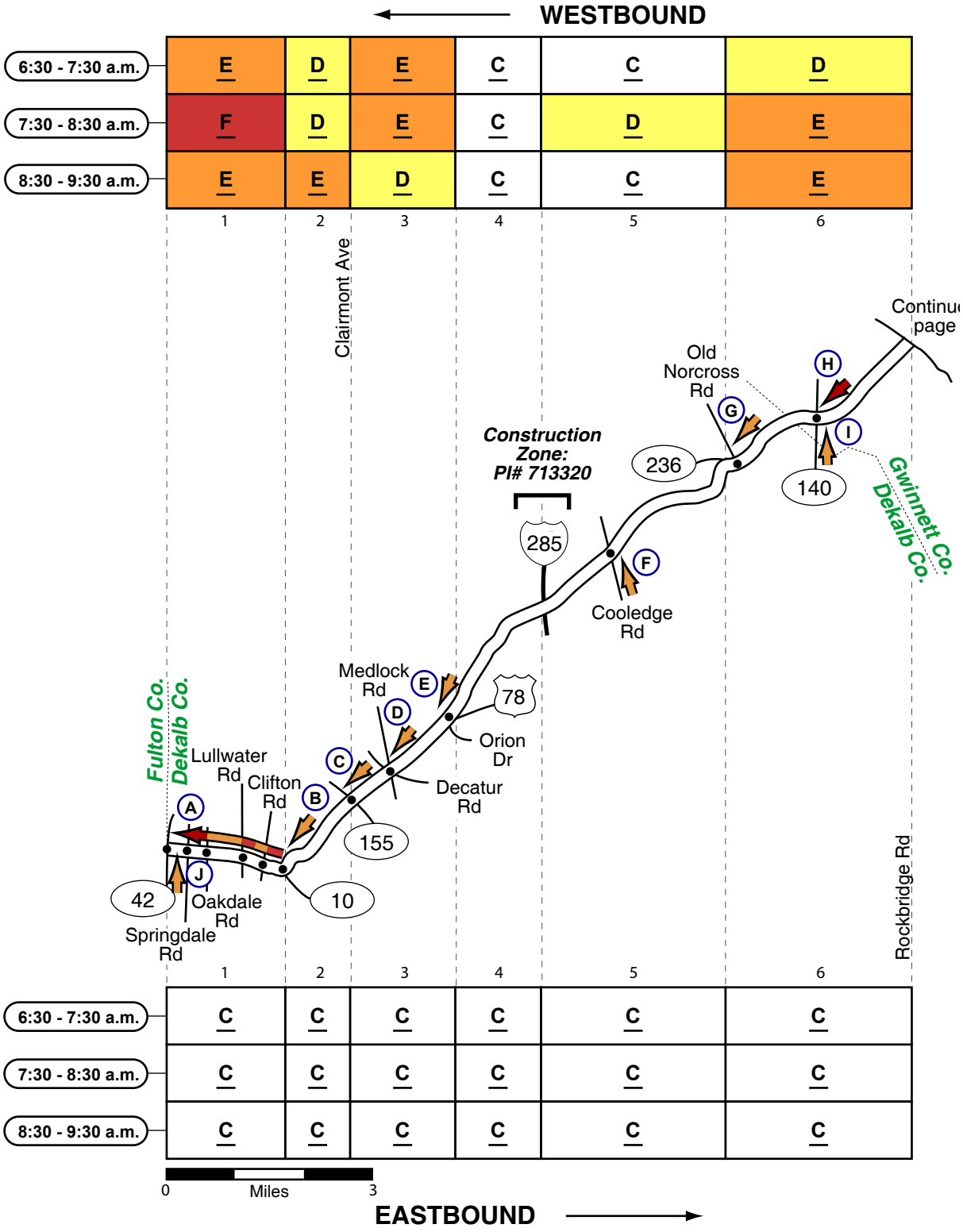
G
Congestion Type: Mainline Signal Queue
Location: Shopping Center west of SR 6
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

H
Congestion Type: Cross Road Signal Queue
Location: Sweetwater Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

J
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 92
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane at SR 8/SR 92.

Spring 2008

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Morning

A
Congestion Type: Mainline Signal Queues
Location: Between SR 10 & SR 42
Frequency: Most Observations
Direction: Westbound
Number of Lanes: 2
Note: During the peak period, a one to two mile zone of westbound congestion was found on SR 8 between SR 10 and SR 42. Signals generating congestion included: SR 42, Springdale Rd, Oakdale Rd, Lullwater Rd, and Clifton Rd. On some days but not others, a mostly continuous zone of congestion was found between Clifton Rd and SR 42.

B
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: Decatur Rd/Medlock Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

E
Congestion Type: Mainline Signal Queue
Location: Orion Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 3

F
Congestion Type: Cross Road Signal Queue
Location: Cooledge Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

G
Congestion Type: Mainline Signal Queue
Location: Old Norcross Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

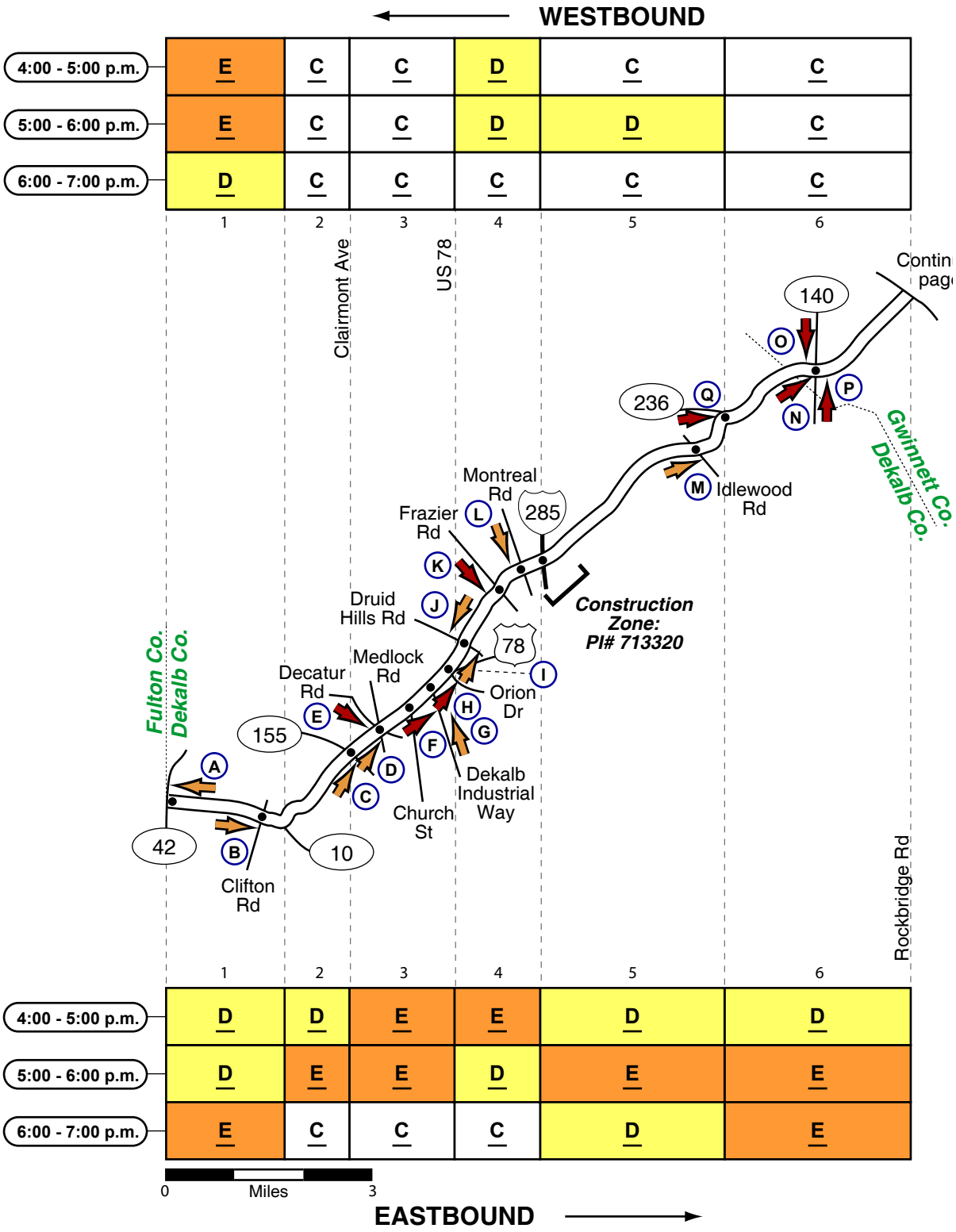
I
Congestion Type: Cross Road Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Construction Zone
PI# 713320
Description: Interchange construction at I-285

Spring 2008

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Evening



	1	2	3	4	5	6
4:00 - 5:00 p.m.	E	C	C	D	C	C
5:00 - 6:00 p.m.	E	C	C	D	D	C
6:00 - 7:00 p.m.	D	C	C	C	C	C

	1	2	3	4	5	6
4:00 - 5:00 p.m.	D	D	E	E	D	D
5:00 - 6:00 p.m.	D	E	E	D	E	E
6:00 - 7:00 p.m.	E	C	C	C	D	E

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Evening

A
Congestion Type: Left Turn Queue
Location: SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, the queue in the left-turn lane typically extended back into the left lane of SR 8.

B
Congestion Type: Mainline Signal Queue
Location: Clifton Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: Decatur Rd/Medlock Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3

E
Congestion Type: Cross Road Signal Queue
Location: Decatur Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Dekalb Industrial Way
Frequency: On some days but not others
Direction: Eastbound
Queue Population: 30 to 60 vpl
Number of Lanes: 3
Note: When congested, the queue extended back through the upstream signal at Church St.

G
Congestion Type: Mainline Signal Queue
Location: Dekalb Industrial Way
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: Orion Dr
Frequency: Most observations before 6:00 p.m.
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

I
Congestion Type: Mainline Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

K
Congestion Type: Cross Road Signal Queue
Location: Frazier Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

L
Congestion Type: Cross Road Signal Queue
Location: Montreal Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

M
Congestion Type: Mainline Signal Queue
Location: Idlewood Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

N
Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

O
Congestion Type: Cross Road Signal Queue
Location: SR 140
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane.

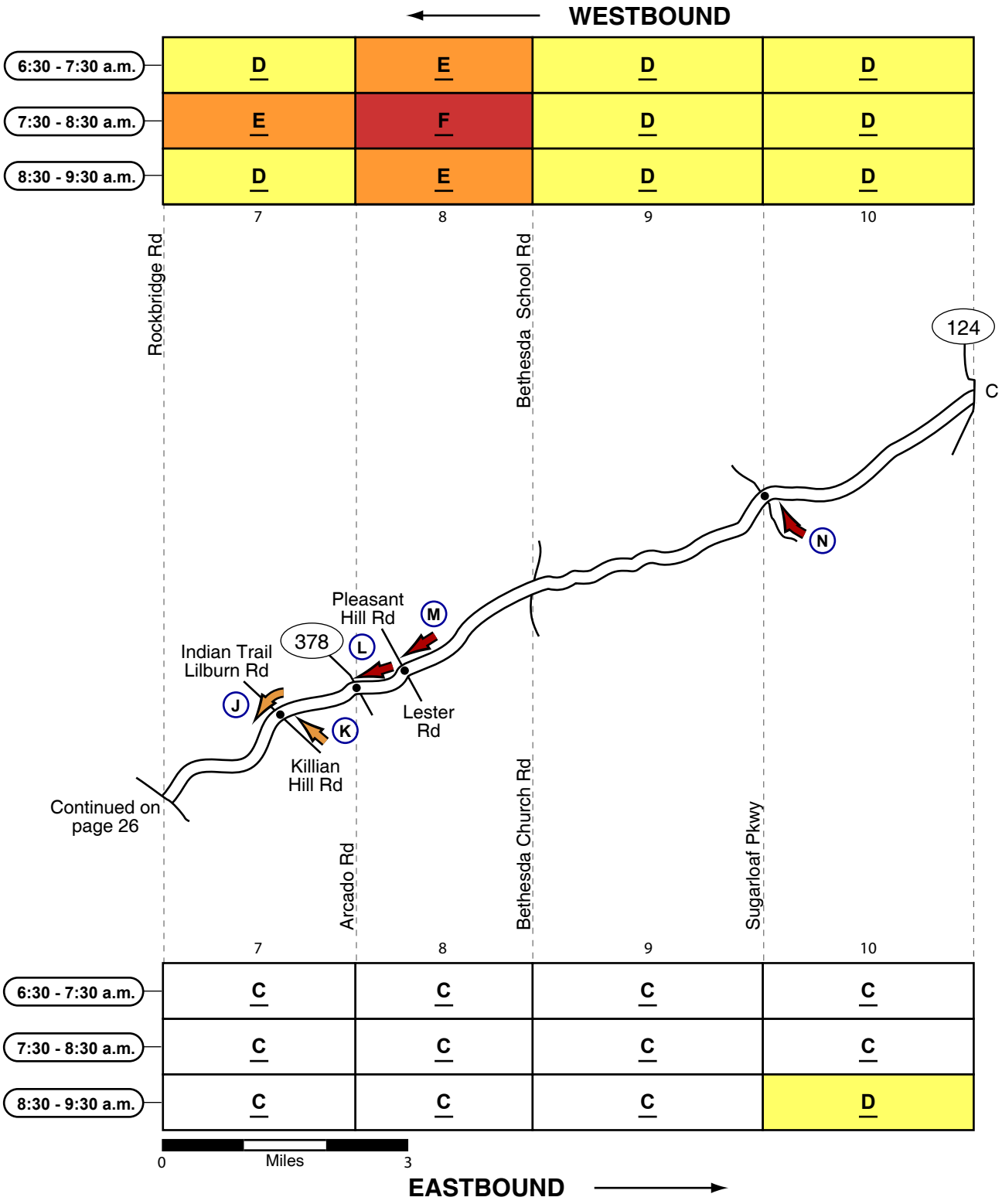
P
Congestion Type: Cross Road Signal Queue
Location: SR 140
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Q
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: On some days but not others
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: The head of the queue was found in the two left-turn lanes at SR 8; congestion typically extended back into the mainline of SR 236.

Construction Zone
PI# 713320
Description: Interchange construction at I-285

Spring 2008

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Morning

J
Congestion Type: Platoons
Location: Between SR 378 &
Rockbridge Rd
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Cross Road Signal Queue
Location: Killian Hill Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

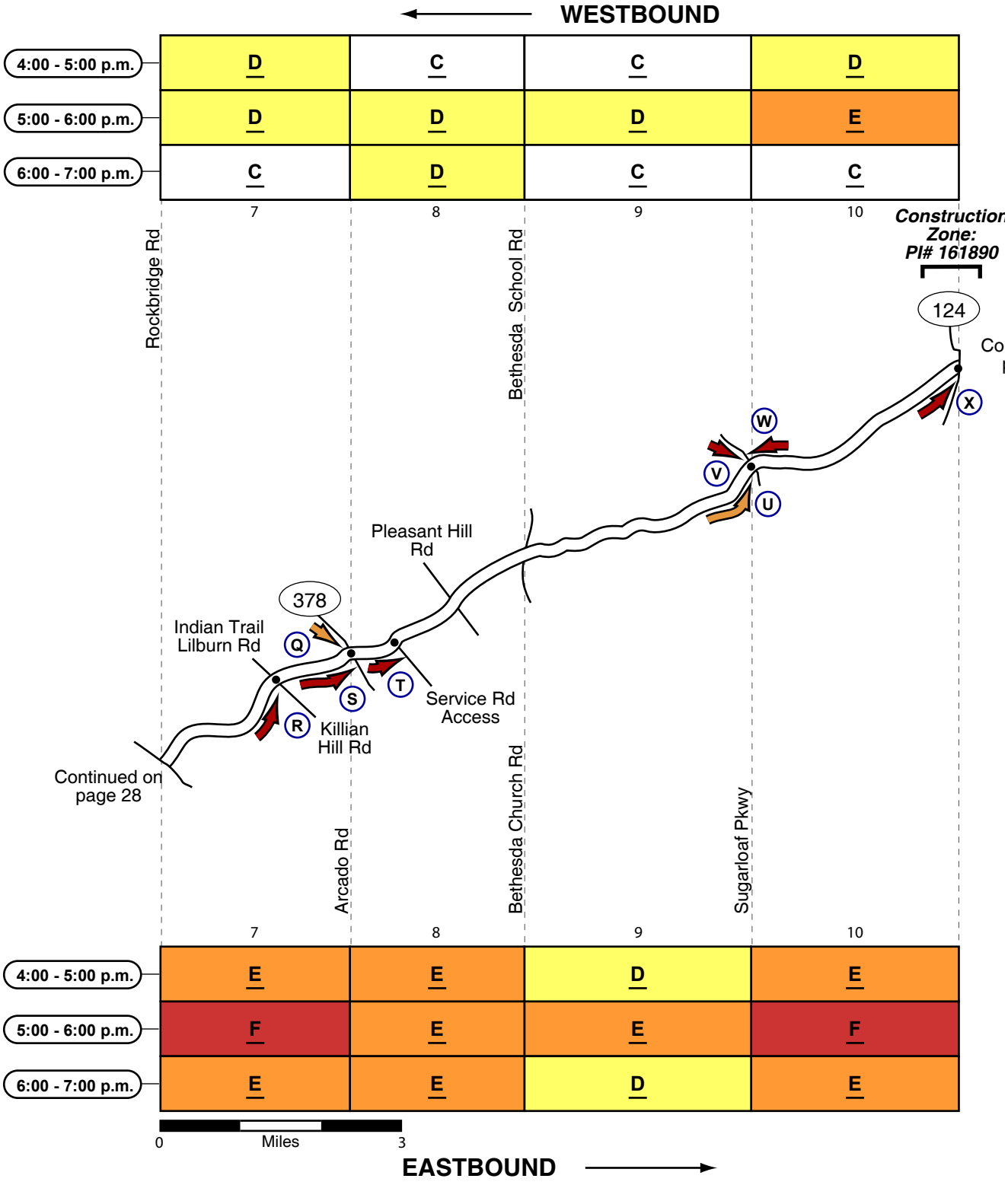
L
Congestion Type: Mainline Signal Queue
Location: SR 378
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

M
Congestion Type: Mainline Signal Queue
Location: Pleasant Hill Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

N
Congestion Type: Cross Road Signal Queue
Location: Sugarloaf Parkway
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 2

Spring 2008

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Evening

Q
Congestion Type: Cross Road Signal Queue
Location: SR 378
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane; during one observation, congestion extended back into the left lane of SR 378.

R
Congestion Type: Mainline Signal Queue
Location: Killian Hill Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

S
Congestion Type: Mainline Signal Queue
Location: SR 378
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

T
Congestion Type: Mainline Signal Queue
Location: Shopping Center west of Pleasant Hill Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

U
Congestion Type: Platoons
Location: Approaching Sugarloaf Parkway
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

V
Congestion Type: Cross Road Signal Queue
Location: Sugarloaf Parkway
Frequency: One day only
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

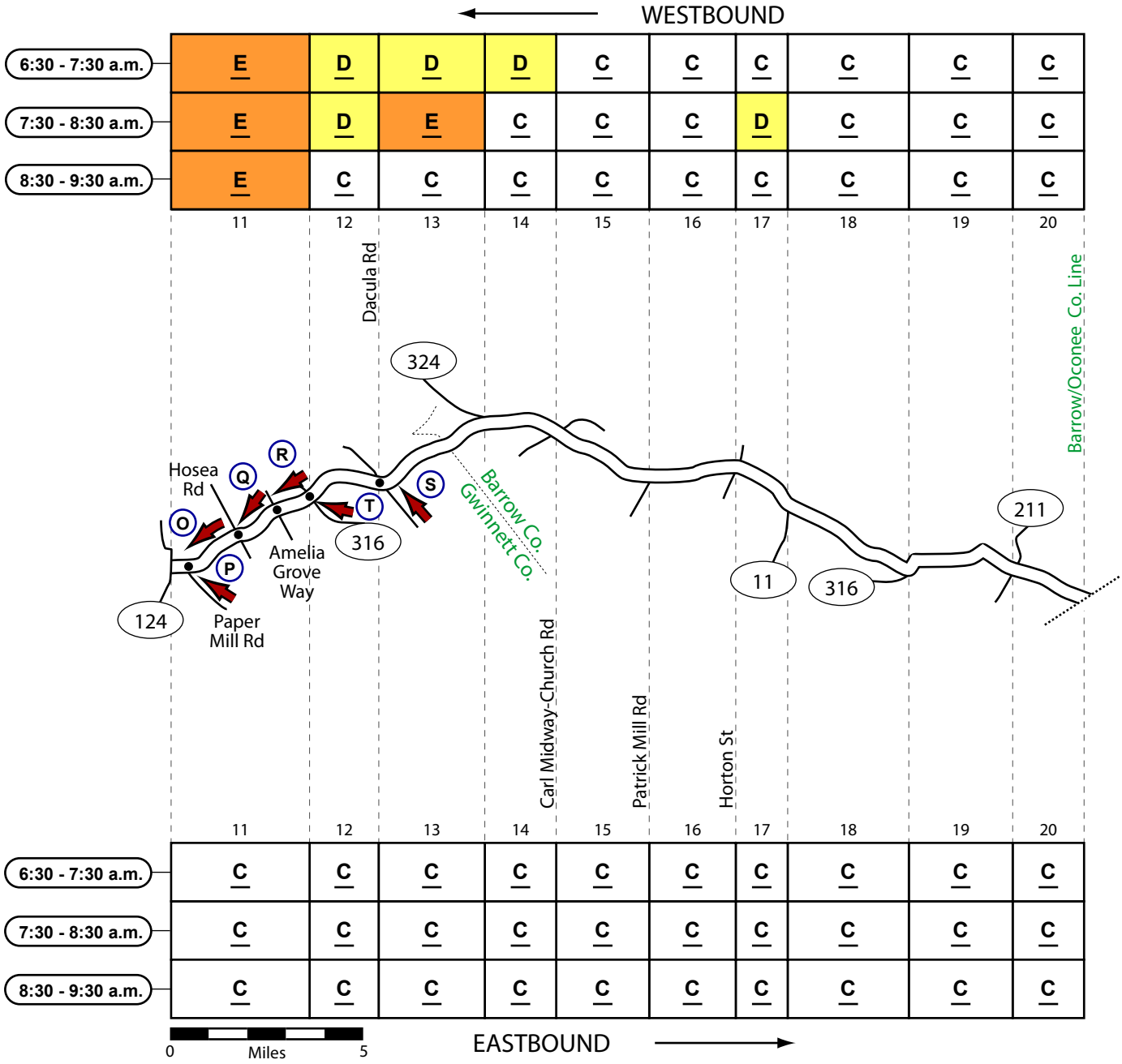
W
Congestion Type: Mainline Signal Queue
Location: Sugarloaf Parkway
Frequency: Peak Hour
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

X
Congestion Type: Mainline Signal Queue
Location: SR 124
Frequency: Most observations
Direction: Eastbound
Queue Population: 25 to 65 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically backed through the upstream signal at Jackson St.

Construction Zone
PI# 161890
Description: Roadway Widening/Intersection Improvement

Spring 2008

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Morning

O
Congestion Type: Mainline Signal Queue
Location: Paper Mill Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

P
Congestion Type: Cross Road Signal Queue
Location: Paper Mill Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Q
Congestion Type: Mainline Signal Queue
Location: Hosea Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

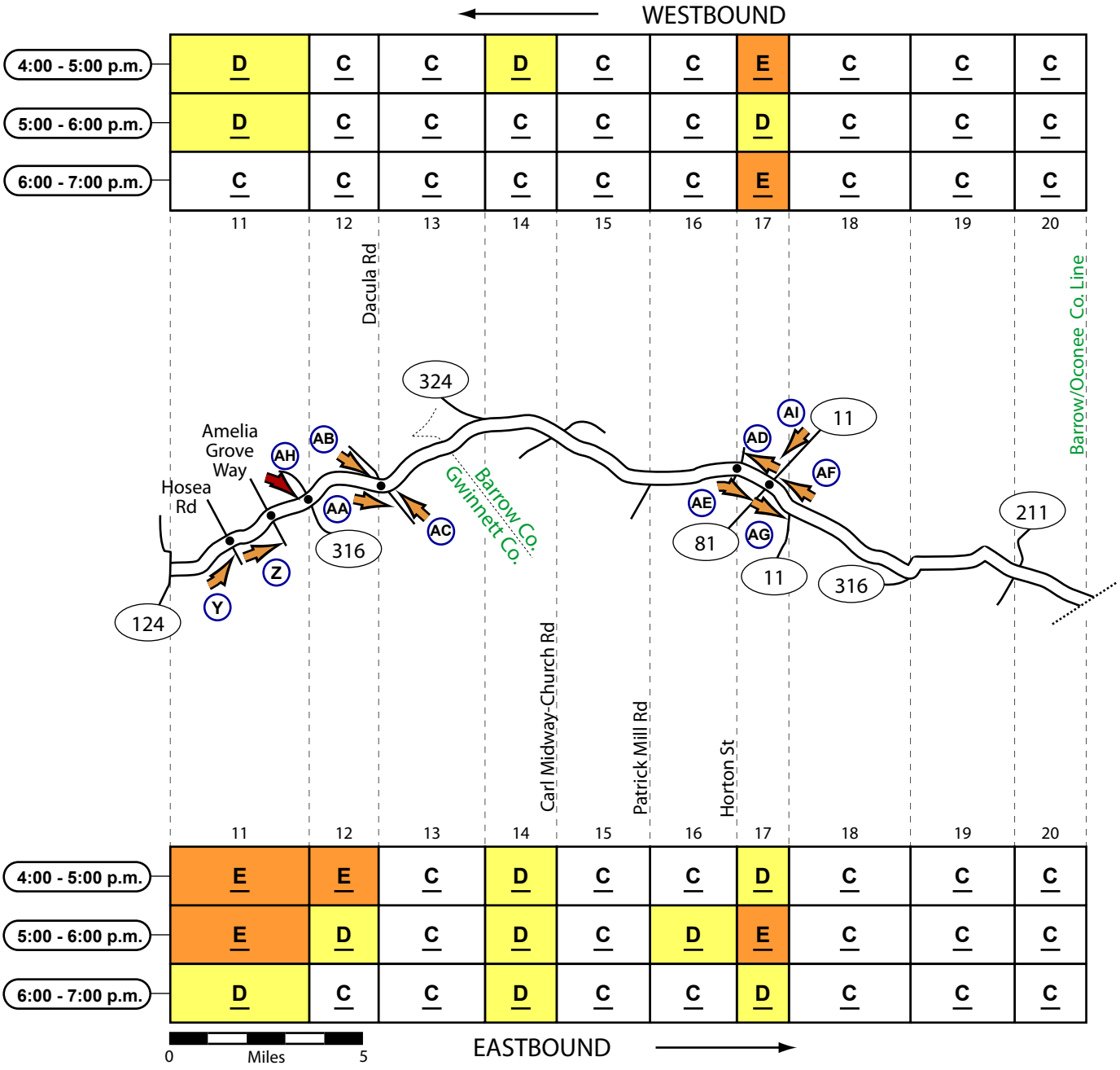
R
Congestion Type: Mainline Signal Queue
Location: Amelia Grove Way
Frequency: Peak Hour
Direction: Westbound
Queue Population: 30 to 100 vpl
Number of Lanes: 1
Note: During some observations, congestion extended back through the upstream signal at Sweetgum Rd.

S
Congestion Type: Cross Road Signal Queue
Location: Dacula Rd
Frequency: Most observations after 8:30 a.m.
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

T
Congestion Type: Cross Road Signal Queue
Location: SR 316
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Population: 25 to 70 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Spring 2008

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Evening



	11	12	13	14	15	16	17	18	19	20
4:00 - 5:00 p.m.	D	C	C	D	C	C	E	C	C	C
5:00 - 6:00 p.m.	D	C	C	C	C	C	D	C	C	C
6:00 - 7:00 p.m.	C	C	C	C	C	C	E	C	C	C

	11	12	13	14	15	16	17	18	19	20
4:00 - 5:00 p.m.	E	E	C	D	C	C	D	C	C	C
5:00 - 6:00 p.m.	E	D	C	D	C	D	E	C	C	C
6:00 - 7:00 p.m.	D	C	C	D	C	C	D	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 8 (Dekalb/Gwinnett & Barrow Counties) - Evening

Y
Congestion Type: Mainline Signal Queue
Location: Hosea Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Z
Congestion Type: Mainline Signal Queue
Location: Amelia Grove Way
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AA
Congestion Type: Mainline Signal Queue
Location: Dacula Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AB
Congestion Type: Cross Road Signal Queue
Location: Dacula Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AC
Congestion Type: Cross Road Signal Queue
Location: Dacula Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AD
Congestion Type: Mainline Signal Queue
Location: Horton St
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

AE
Congestion Type: Mainline Signal Queue
Location: SR 81
Frequency: One day only
Direction: Eastbound
Queue Population: 30 to 35 vpl
Number of Lanes: 1

AF
Congestion Type: Platoons
Location: Between SR 11 & SR 81
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

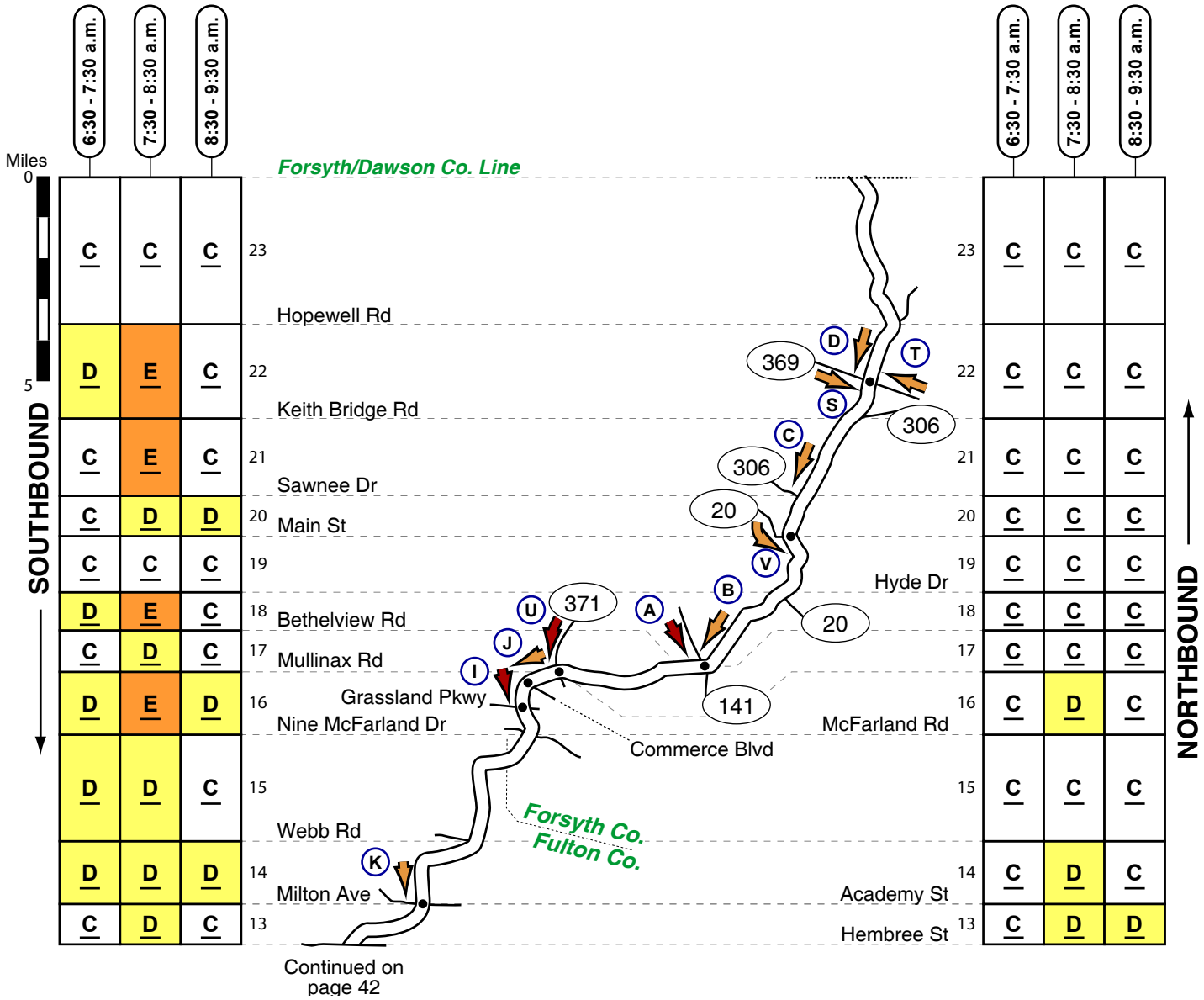
AG
Congestion Type: Platoons
Location: Between SR 81 & SR 11
Frequency: Peak Hour
Direction: Eastbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

AH
Congestion Type: Cross Road Signal Queue
Location: SR 316
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2
(per 2007 data/analysis)

AI
Congestion Type: Cross Road Signal Queue
Location: SR 11
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Factors contributing to the congestion were: 1) the railroad crossing in the vicinity of SR 8 and; 2) the series of closely spaced signals approaching SR 8.

Spring 2008

SR 9 (Fulton & Forsyth Counties) - Morning



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 9 (Fulton & Forsyth Counties) - Morning

A
Congestion Type: Cross Road Signal Queue
Location: SR 141
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction at the intersection.

B
Congestion Type: Mainline Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

C
Congestion Type: Platoons
Location: Between Keith Bridge Rd and Sawnee Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Southbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1

I
Congestion Type: Mainline Signal Queue
Location: Grassland Pkwy
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

J
Congestion Type: Mainline Signal Queue
Location: Commerce Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

K
Congestion Type: Left-Turn Queue
Location: Milton Ave
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

S
Congestion Type: Cross Road Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Eastbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1

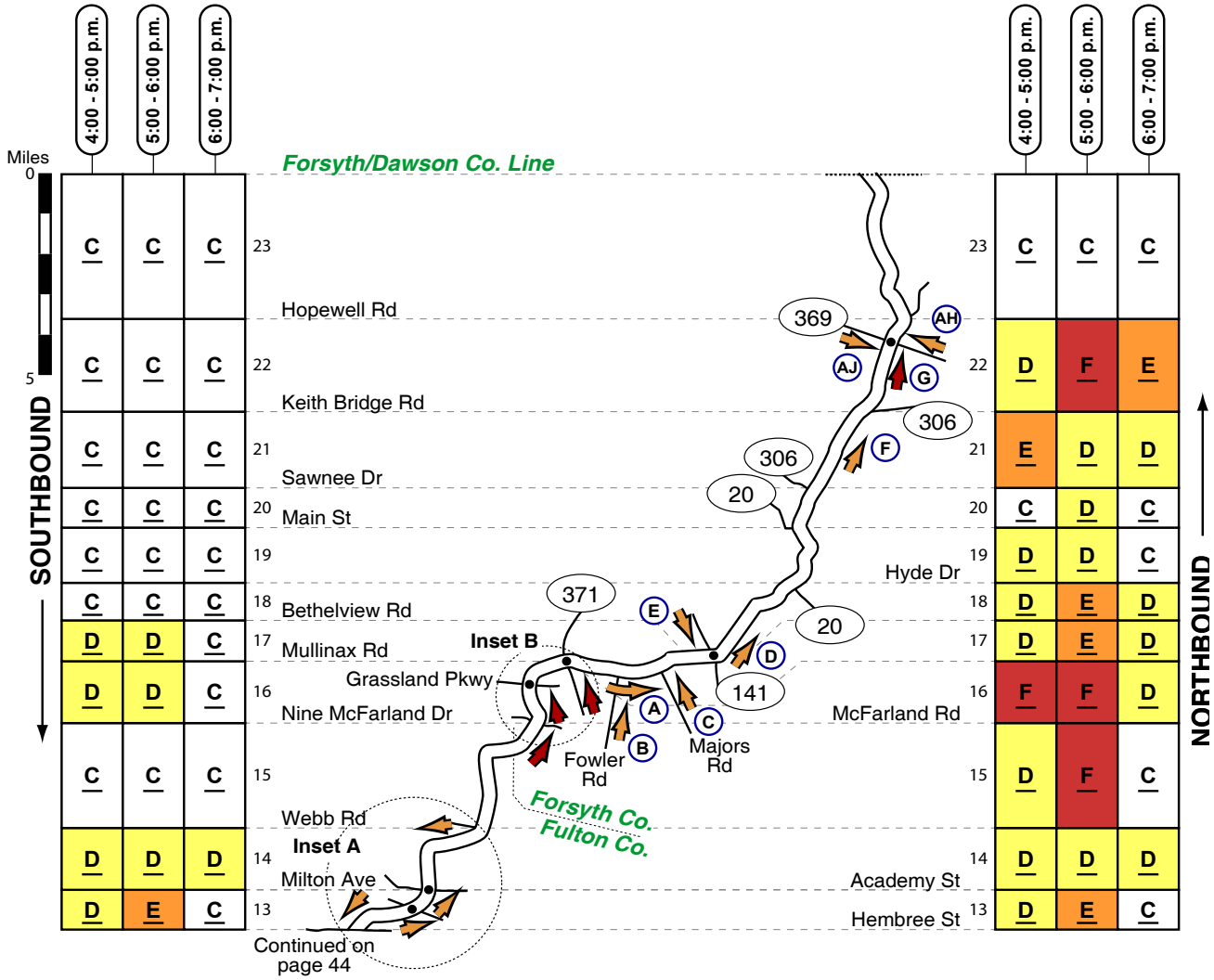
T
Congestion Type: Cross Road Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

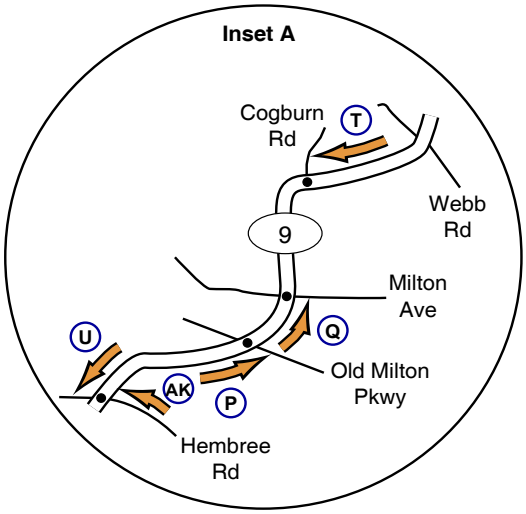
U
Congestion Type: Cross Road Signal Queue
Location: SR 371
Frequency: Most observations
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

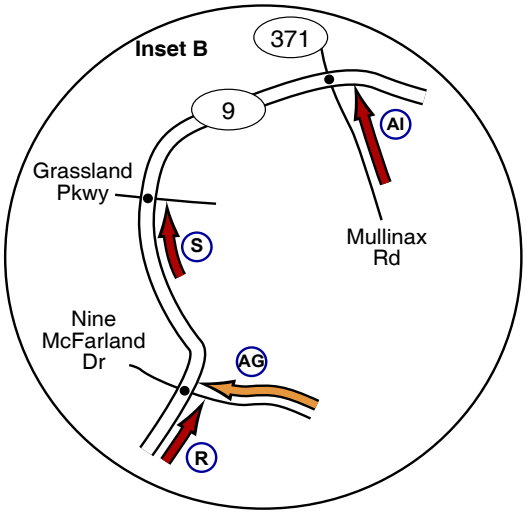
V
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2
Note: Congestion was typically limited to the right lane. During one observation (March 5th at 9:22 a.m.), congestion backed through the upstream signal at Tribble Gap Rd.

Spring 2008

SR 9 (Fulton & Forsyth Counties) - Evening







Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 9 (Fulton & Forsyth Counties) - Evening

A
Congestion Type: Platoons
Location: Between SR 371 & SR 141
Frequency: Peak Hour
Direction: Northbound (Eastbound)
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Queue (Stop Sign)
Location: Fowler Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Queue (Stop Sign)
Location: Majors Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Congestion extended back onto Shiloh Rd.

D
Congestion Type: Platoons
Location: Between SR 141 & SR 20
Frequency: Intermittent
Direction: Northbound (Eastbound)
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Platoons
Location: Between Sawnee Dr & Keith Bridge Rd
Frequency: Most observations before 5:00 p.m.
Direction: Northbound
Platoon Population: 25 to 50 vpl
Number of Lanes: 1

G
Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

P
Congestion Type: Mainline Signal Queue
Location: Old Milton Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

Q
Congestion Type: Mainline Signal Queue
Location: Milton Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

R
Congestion Type: Mainline Signal Queue
Location: Nine McFarland Dr
Frequency: Peak Hour
Direction: Northbound
Queue Population: 45 to 55 vpl
Number of Lanes: 1

S
Congestion Type: Mainline Signal Queue
Location: Grassland Pkwy
Frequency: Most observations
Direction: Northbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

T
Congestion Type: Mainline Signal Queue
Location: Cogburn Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

U
Congestion Type: Mainline Signal Queue
Location: Hembree Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

AG
Congestion Type: Cross Road Signal Queue
Location: McFarland Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

AH
Congestion Type: Cross Road Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

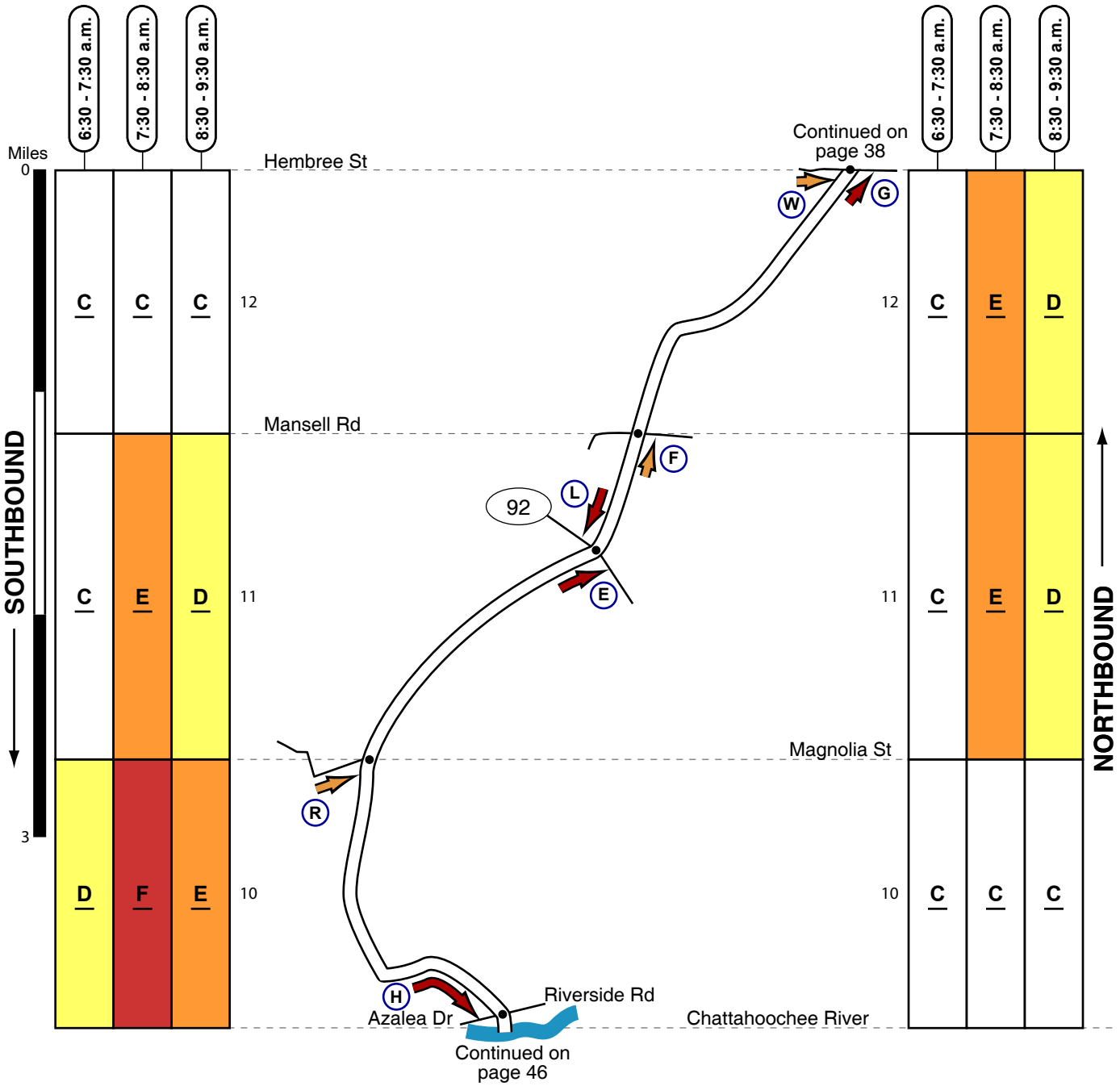
AI
Congestion Type: Cross Road Signal Queue
Location: SR 371
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AJ
Congestion Type: Cross Road Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

AK
Congestion Type: Cross Road Signal Queue
Location: Hembree St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left lane of two waiting to turn southbound on SR 9.
(per 2007 data/analysis)

Spring 2008

SR 9 (Fulton County) - Morning



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 9 (Fulton County) - Morning

E
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Peak Hour
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Hembree Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: Azalea Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 30 to 80 vpl
Number of Lanes: 2

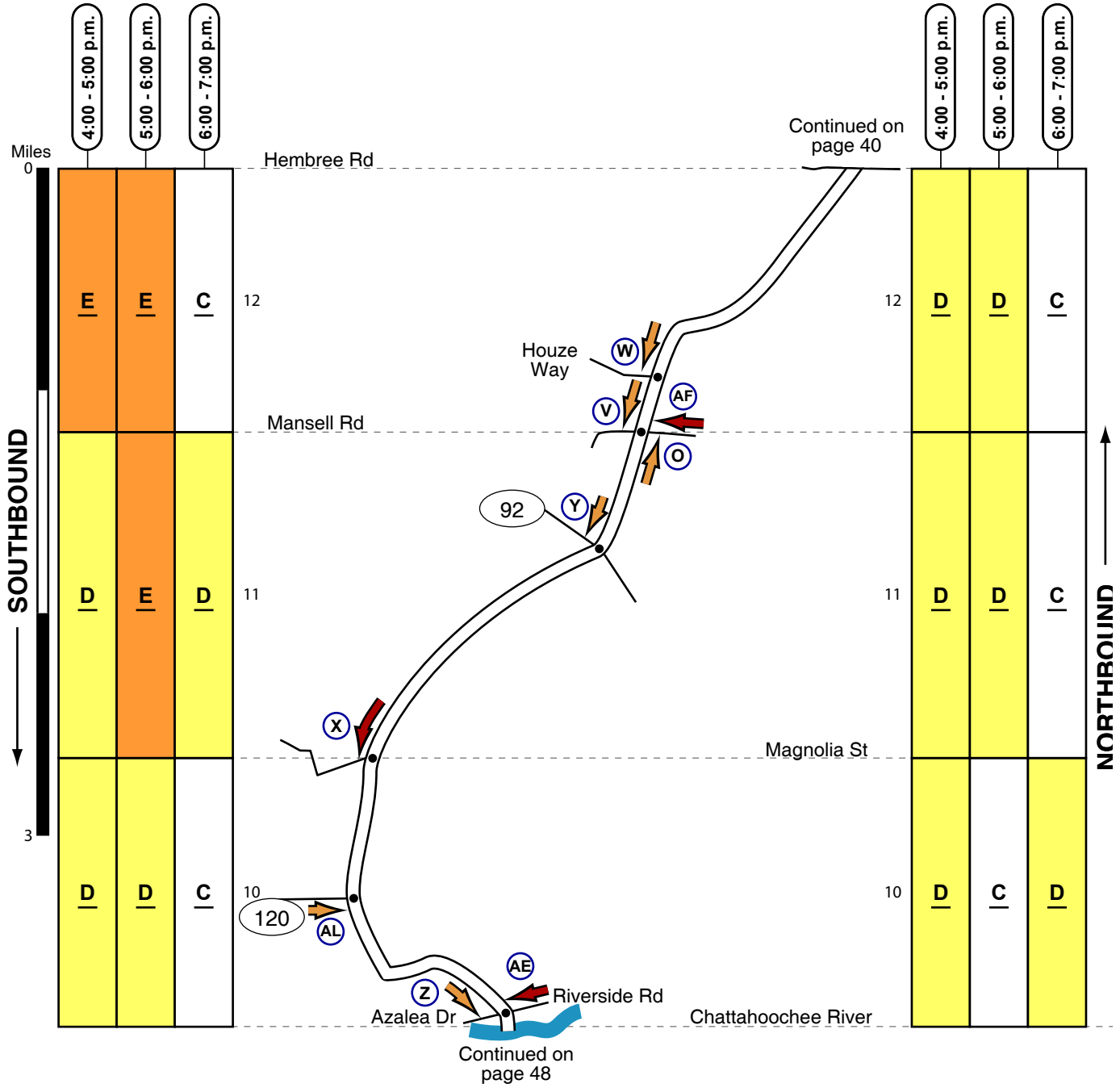
L
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2
Note: During one observation, congestion approaching SR 92 extended back through the upstream signal at Commerce Pkwy.

R
Congestion Type: Cross Road Signal Queue
Location: Magnolia St.
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

W
Congestion Type: Cross Road Signal Queue
Location: Hembree Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
(per 2007 data/analysis)

Spring 2008

SR 9 (Fulton County) - Evening



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 9 (Fulton County) - Evening

O
Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

V
Congestion Type: Mainline Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

W
Congestion Type: Mainline Signal Queue
Location: Houze Way
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

X
Congestion Type: Mainline Signal Queue
Location: Magnolia St
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Y
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Z
Congestion Type: Mainline Signal Queue
Location: Azalea Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: During the evening commuter period, the center lane of three is open to northbound traffic only.

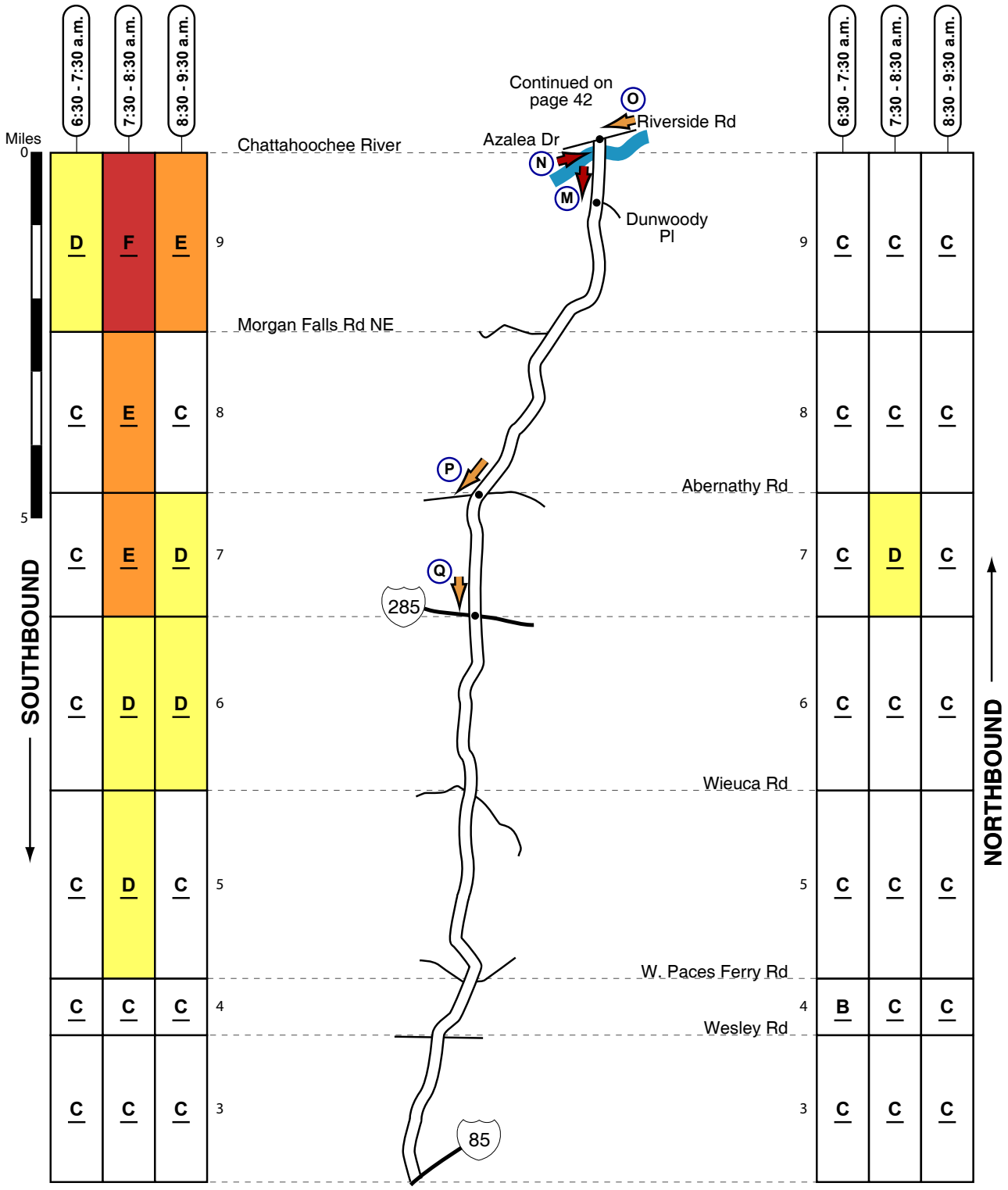
AE
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AF
Congestion Type: Cross Road Signal Queue
Location: Mansell Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

AL
Congestion Type: Cross Road Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Spring 2008

SR 9 (Fulton County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 9 (Fulton County) - Morning

M
Congestion Type: Mainline Signal Queue
Location: Dunwoody Place
Frequency: Most observations
Direction: Southbound
Queue Population: 30 to 60 vpl
Number of Lanes: 2

N
Congestion Type: Cross Road Signal Queue
Location: Azalea Dr
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1

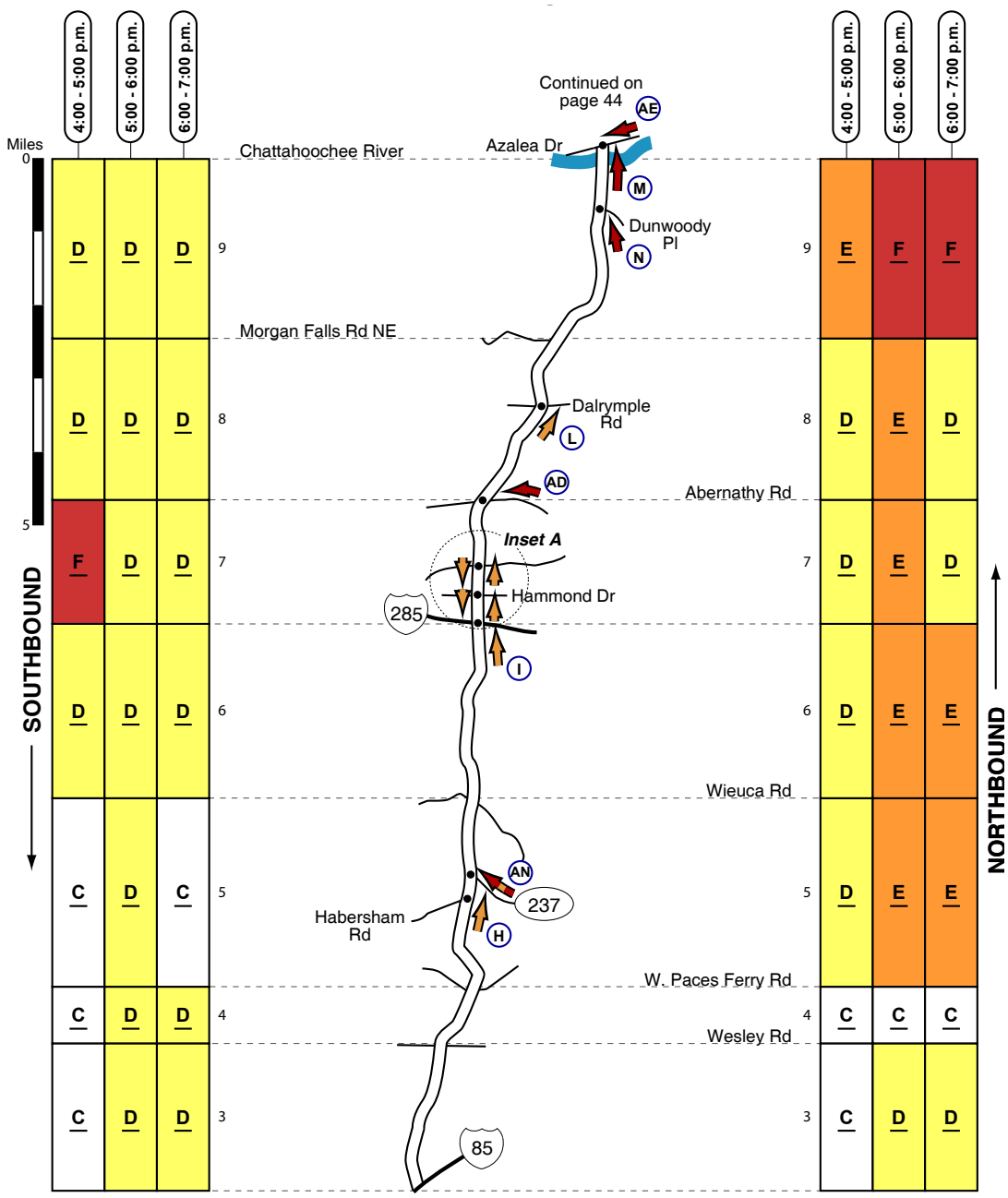
O
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

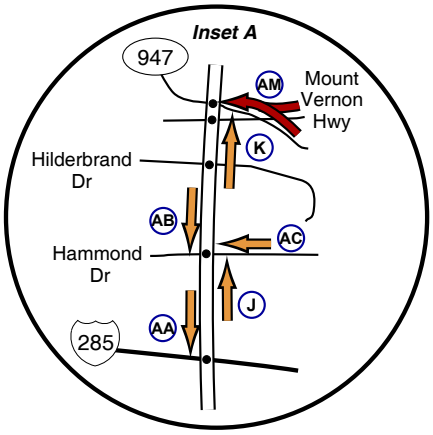
P
Congestion Type: Mainline Signal Queue
Location: Abernathy Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Q
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Spring 2008

SR 9 (Fulton County) - Evening





Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 9 (Fulton County) - Evening

H
Congestion Type: Mainline Signal Queue
Location: SR 237 & Habersham Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: Hammond Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

K
Congestion Type: Mainline Signal Queue
Location: Johnson Ferry Rd (SR 947)/Mt Vernon Hwy/Hilderbrand Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

L
Congestion Type: Mainline Signal Queue
Location: Dalrymple Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

M
Congestion Type: Mainline Signal Queue
Location: Azalea Dr
Frequency: Most observations
Direction: Northbound
Queue Population: 25 to 70 vpl
Number of Lanes: 2
Note: During the peak period, northbound congestion approaching Azalea Dr sometimes extended back through the upstream signal at Dunwoody Place.

N
Congestion Type: Mainline Signal Queue
Location: Dunwoody Pl
Frequency: Peak Hour
Direction: Northbound
Queue Population: 40 to 70 vpl
Number of Lanes: 2
Note: Downstream congestion (signal queue at Azalea Dr) may have exacerbated congestion at Dunwoody Place.

AA
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2

AB
Congestion Type: Mainline Signal Queue
Location: Hammond Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

AC
Congestion Type: Cross Road Signal Queue
Location: Hammond Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

AD
Congestion Type: Cross Road Signal Queue
Location: Abernathy Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

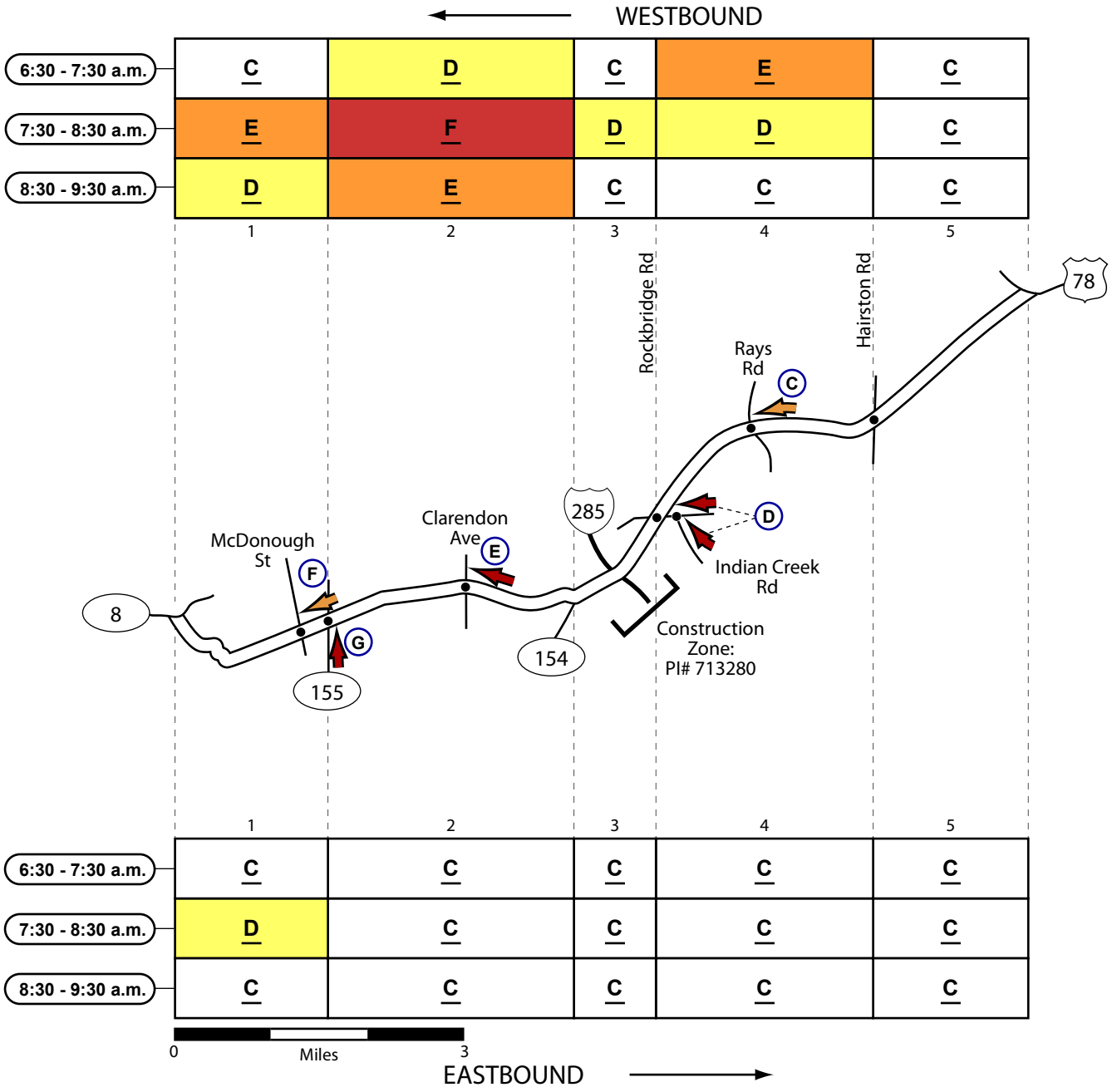
AE
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Most Observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

AM
Congestion Type: Cross Road Signal Queue
Location: SR 947
Frequency: Most observations after 5:00 p.m.
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: Northbound congestion approaching the signal at SR 9 typically extended back through the signal at Mt Vernon Hwy; large queue populations (30-50 vehicles) were typically found on Mt Vernon Hwy approaching the signal at SR 947.

AN
Congestion Type: Cross Road Signal Queue
Location: SR 237
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: Northbound congestion appeared to be exacerbated by several signals at drives accessing commercial buildings in Buckehead.

Spring 2008

SR 10 (Dekalb County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 10 (Dekalb County) - Morning

C
Congestion Type: Mainline Signal Queue
Location: Rays Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 3

D
Congestion Type: Cross Road Signal Queue
Location: Rockbridge Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Intermittently, northbound congestion was found on Indian Creek Dr approaching the signal at Rockbridge Rd; the head of the queue was found in the left-turn lane where vehicles waited to turn into congested flow on Rockbridge Rd.

E
Congestion Type: Mainline Signal Queue
Location: Clarendon Ave
Frequency: Peak Hour
Direction: Westbound
Queue Population: 30 to 90 vpl
Number of Lanes: 1

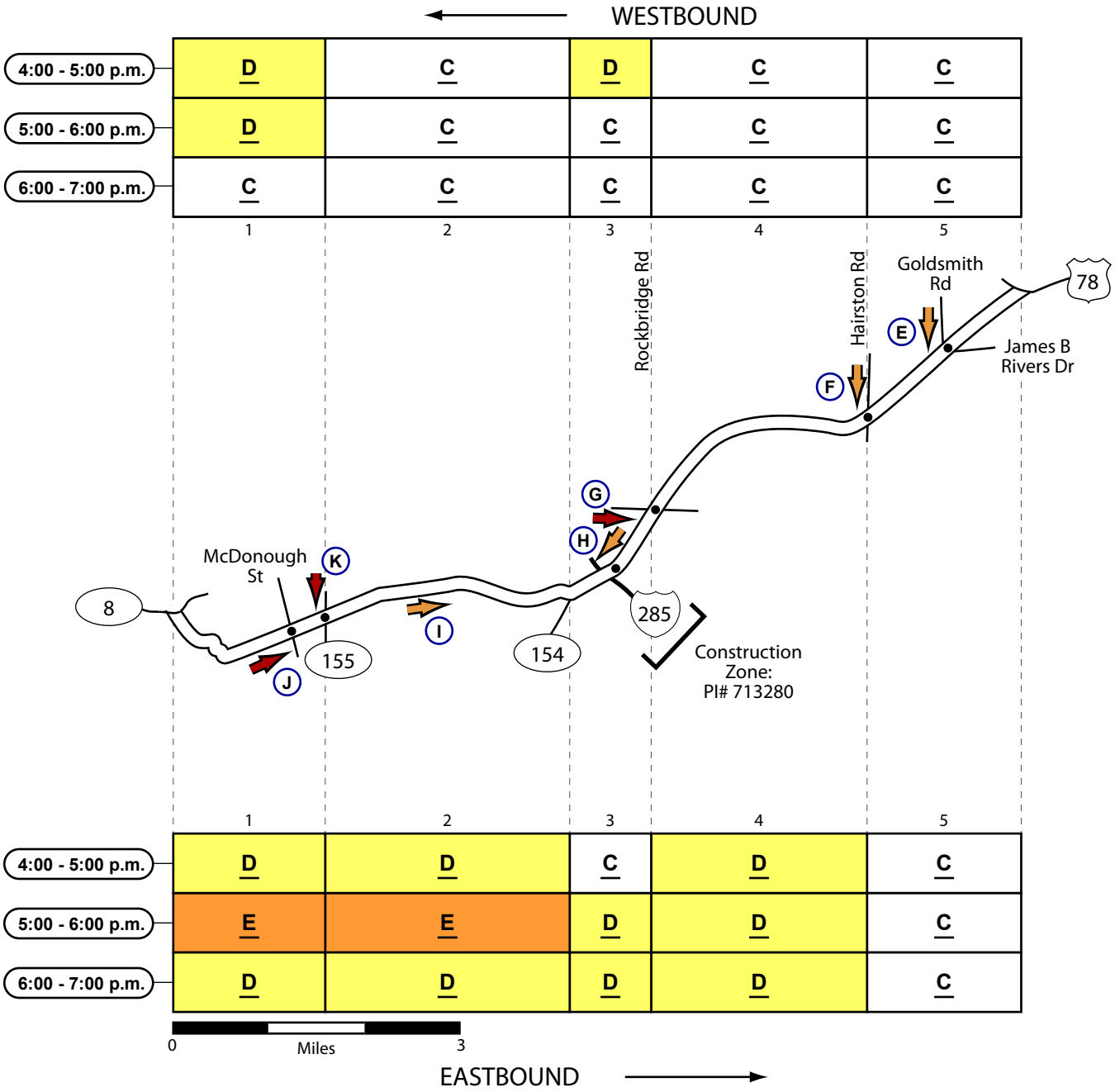
F
Congestion Type: Mainline Signal Queue
Location: McDonough St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: SR 155
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

Construction Zone
PI# 713280
Description: Interchange construction at SR 10

Spring 2008

SR 10 (Dekalb County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 10 (Dekalb County) - Evening

E
Congestion Type: Cross Road Signal Queue
Location: Goldsmith Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: Hairston Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

G
Congestion Type: Cross Road Signal Queue
Location: Rockbridge Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

H
Congestion Type: Left-Turn Queue
Location: I-285
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction at the I-285 interchange.

I
Congestion Type: Platoons
Location: Between SR 155 & Northern Ave
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

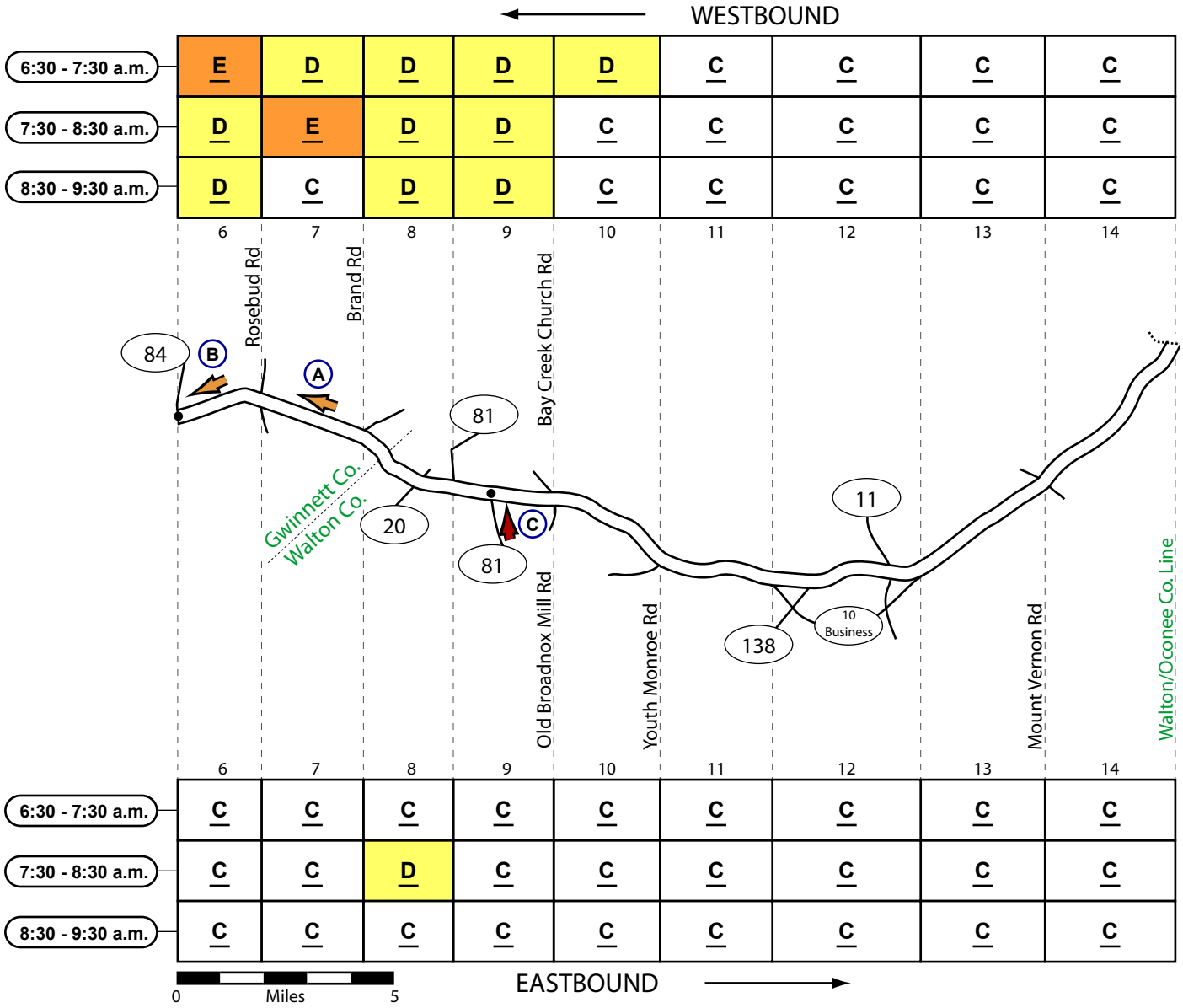
J
Congestion Type: Mainline Signal Queue
Location: McDonough St
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

K
Congestion Type: Cross Road Signal Queue
Location: SR 155
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Construction Zone
PI# 713280
Description: Interchange construction at SR 10

Spring 2008

SR 10 (Gwinnett & Walton Counties) - Morning



A
Congestion Type: Platoons
Location: Between Brand Rd & Rosebud Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

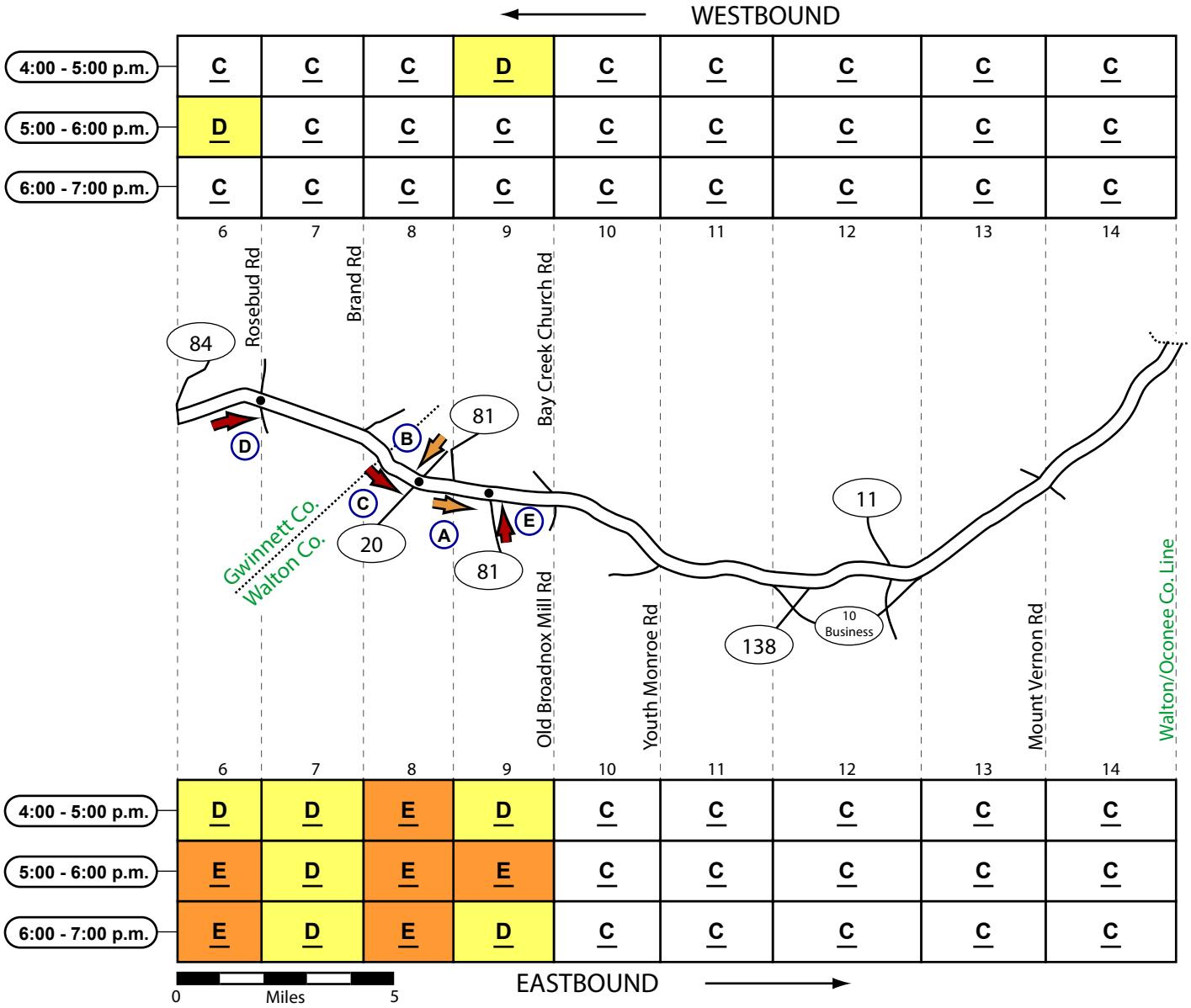
B
Congestion Type: Mainline Signal Queue
Location: SR 84
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: SR 81
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 10 (Gwinnett & Walton Counties) - Evening



A
Congestion Type: Platoons
Location: Vicinity of SR 81
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

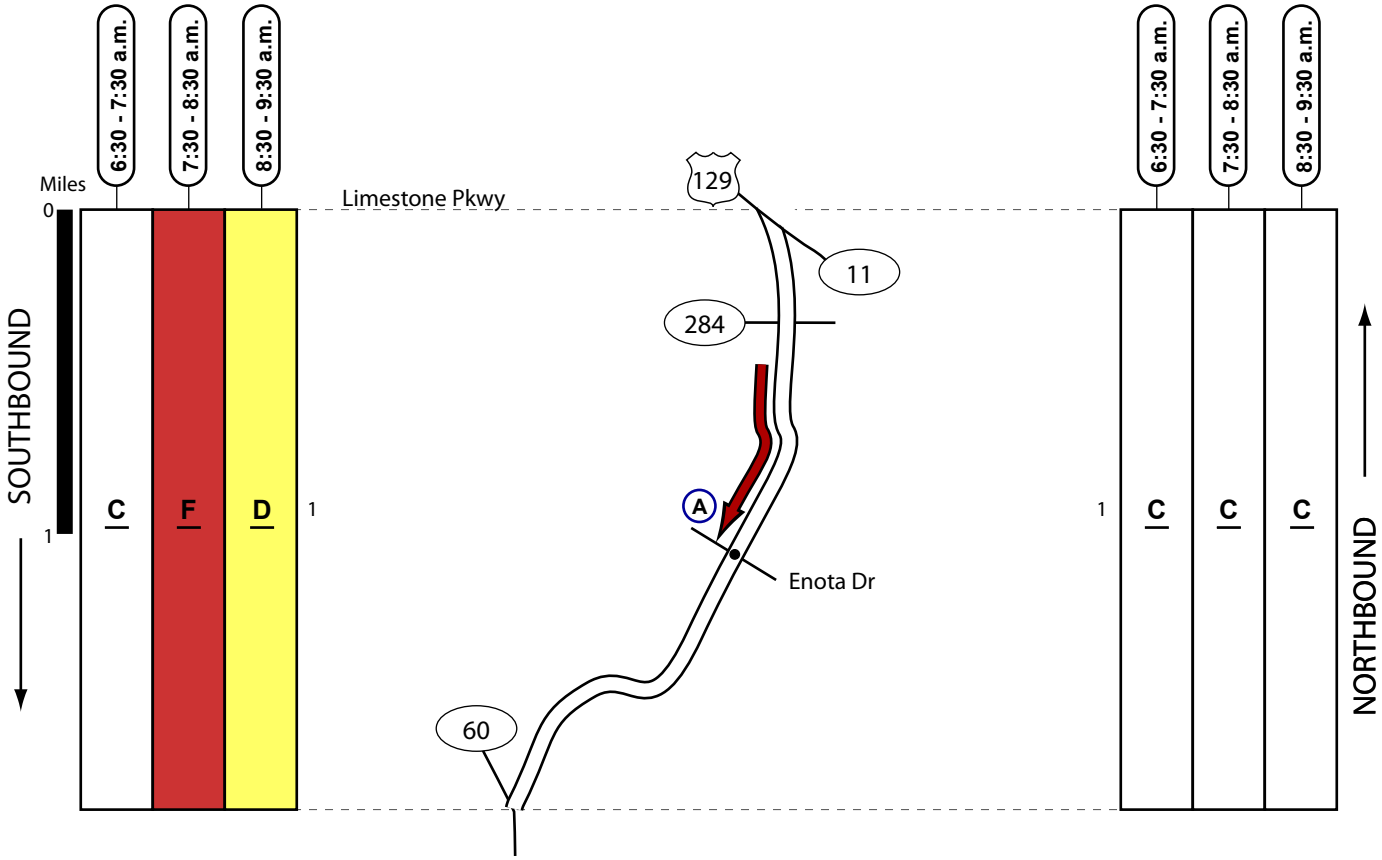
D
Congestion Type: Mainline Signal Queue
Location: Rosebud Rd
Frequency: Most observations after 5:00 p.m.
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

E
Congestion Type: Cross Road Signal Queue
Location: SR 81
Frequency: Peak hour
Direction: Northbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 11 BU (Hall County) - Morning

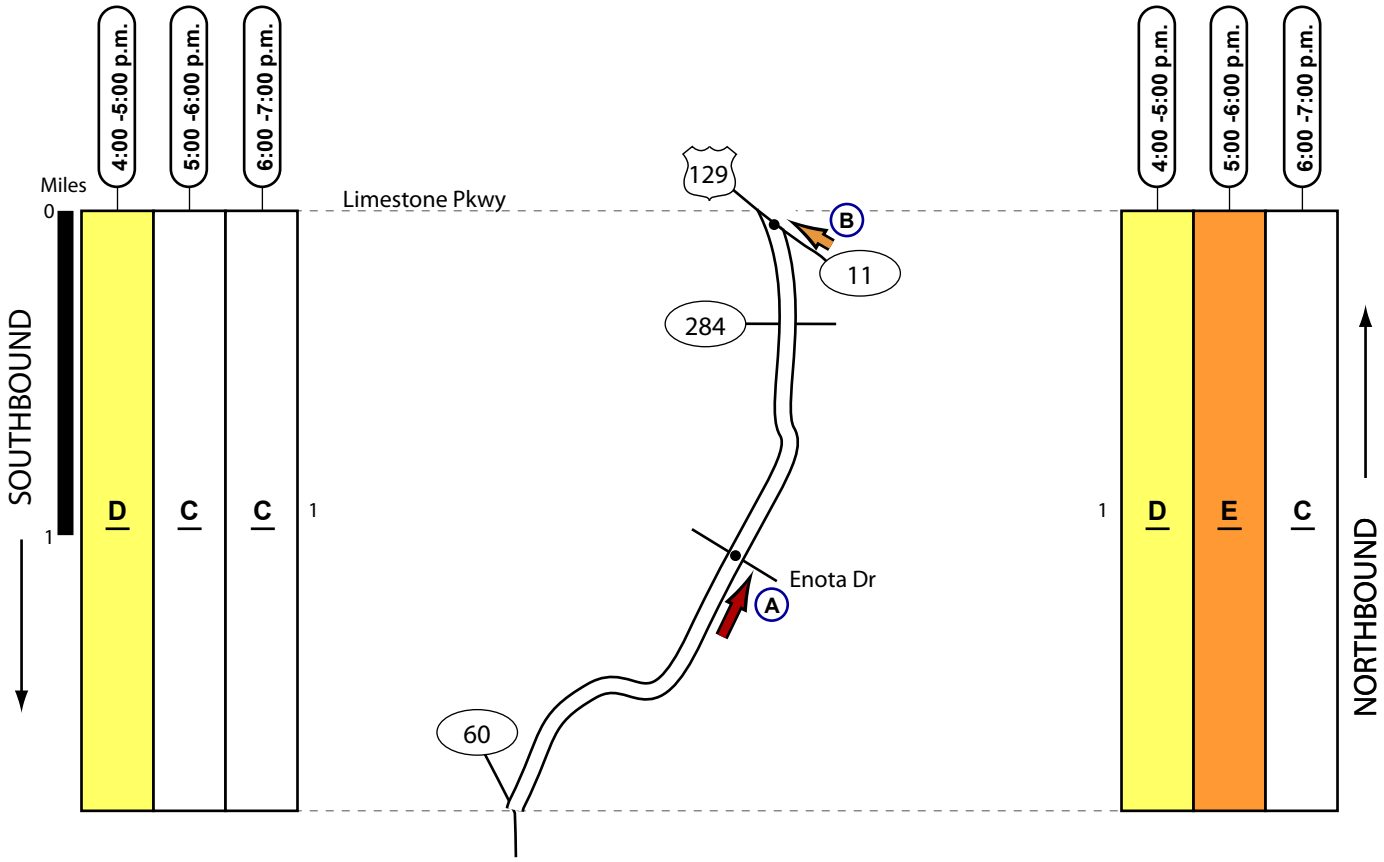


A
Congestion Type: Mainline Signal Queue
Location: Enota Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 50 to 70 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 11 BU (Hall County) - Evening



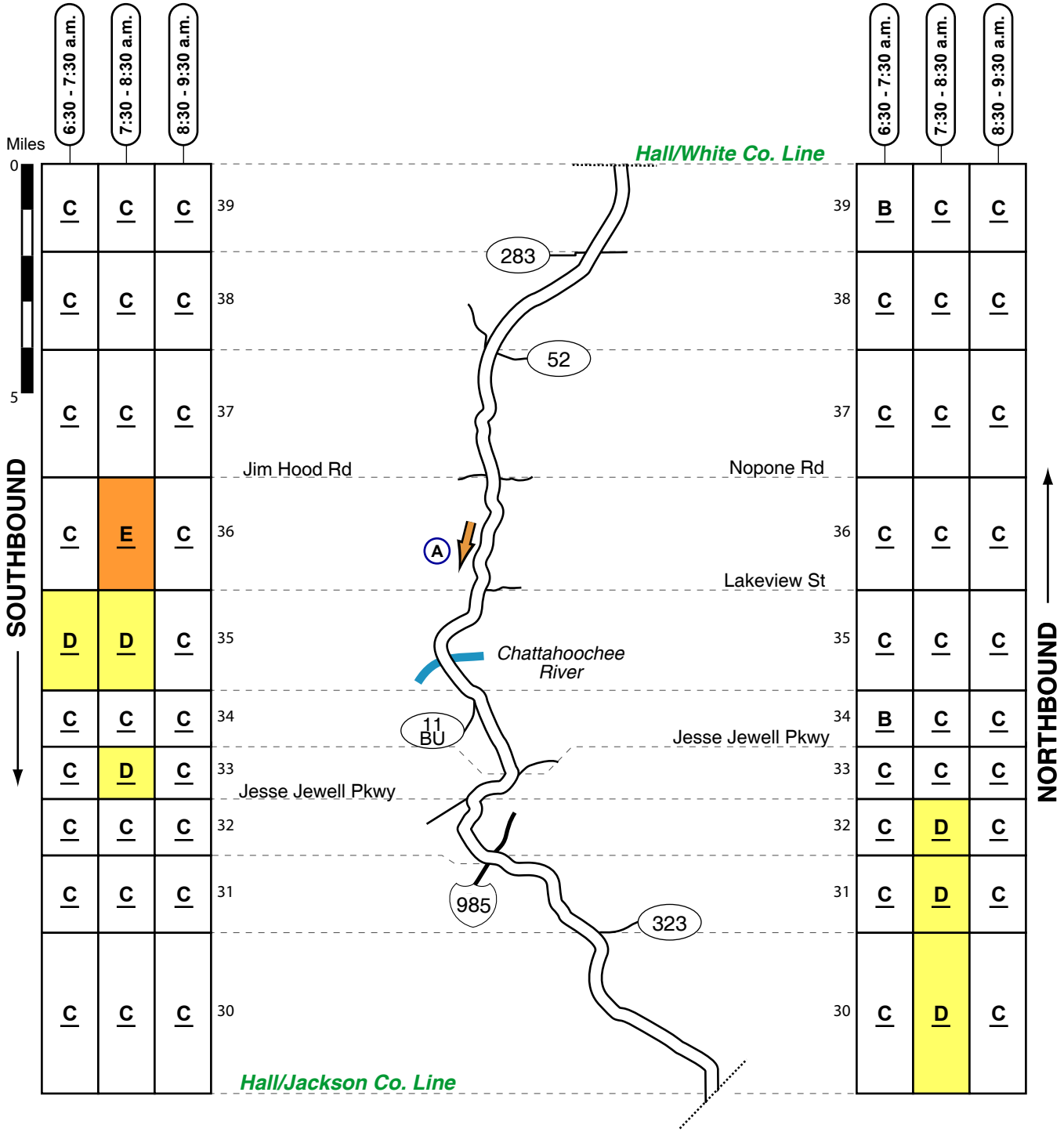
A
Congestion Type: Mainline Signal Queue
Location: Enota Dr
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Signal Queue
Location: SR 11
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

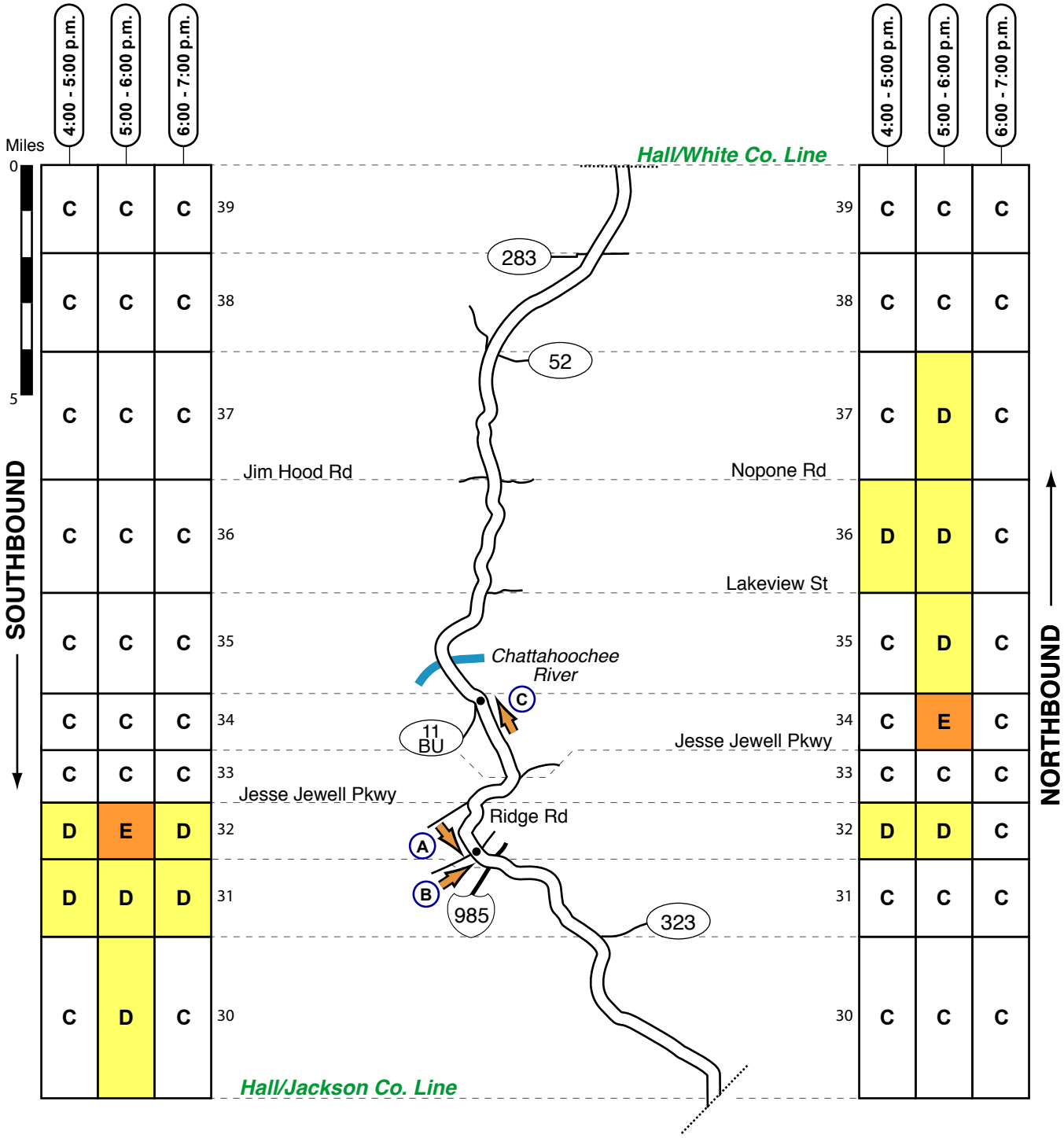
SR 11 (Hall County) - Morning



A
Congestion Type: Platoons
Location: Between Jim Hood Rd & Lakeview St
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 11 (Hall County) - Evening



A
Congestion Type: Mainline Signal Queue
Location: Ridge Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

B
Congestion Type: Cross Road Signal Queue
Location: Ridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

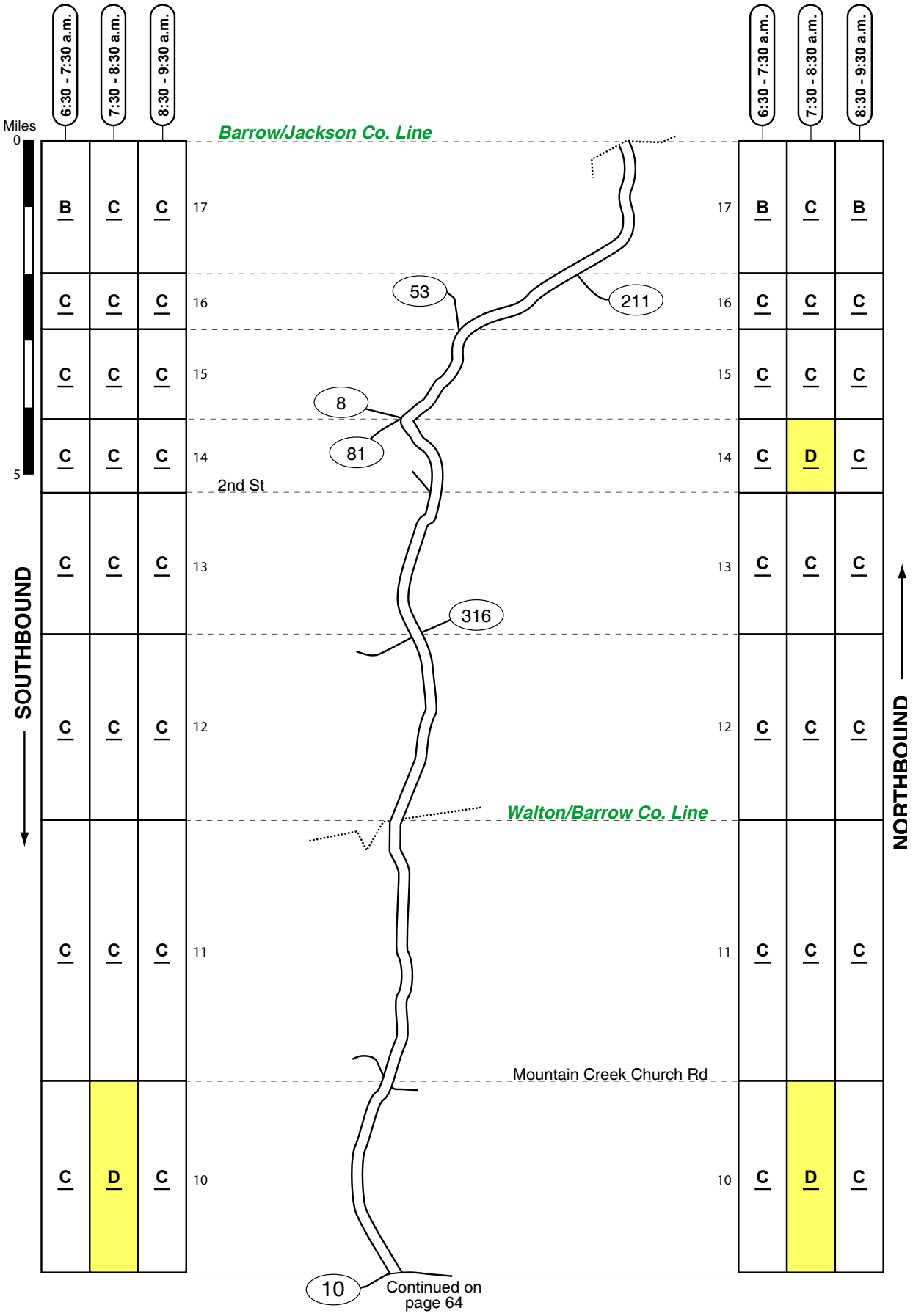
C
Congestion Type: Mainline Signal Queue
Location: SR 11 Business
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

(Blank)

Spring 2008

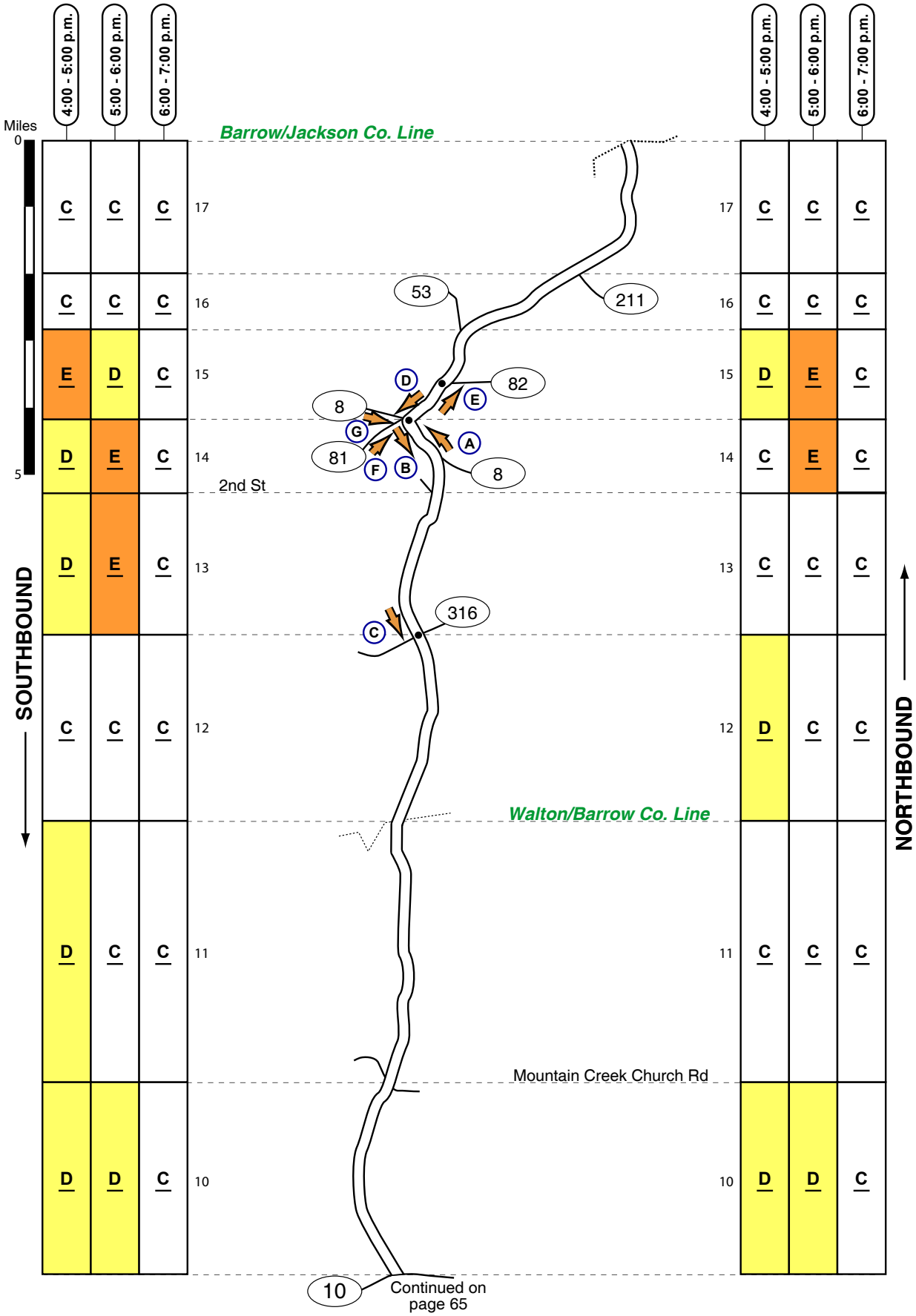
SR 11 (Barrow/Walton & Newton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 11 (Barrow/Walton & Newton Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 11 (Barrow/Walton & Newton Counties) - Evening

A
Congestion Type: Platoons
Location: Between 2nd St & SR 8
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between SR 8 & 2nd St
Frequency: Peak Hour
Direction: Southbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Factors contributing to the congestion were: 1) the railroad crossing in the vicinity of SR 8 and; 2) the series of closely spaced signals approaching SR 8.

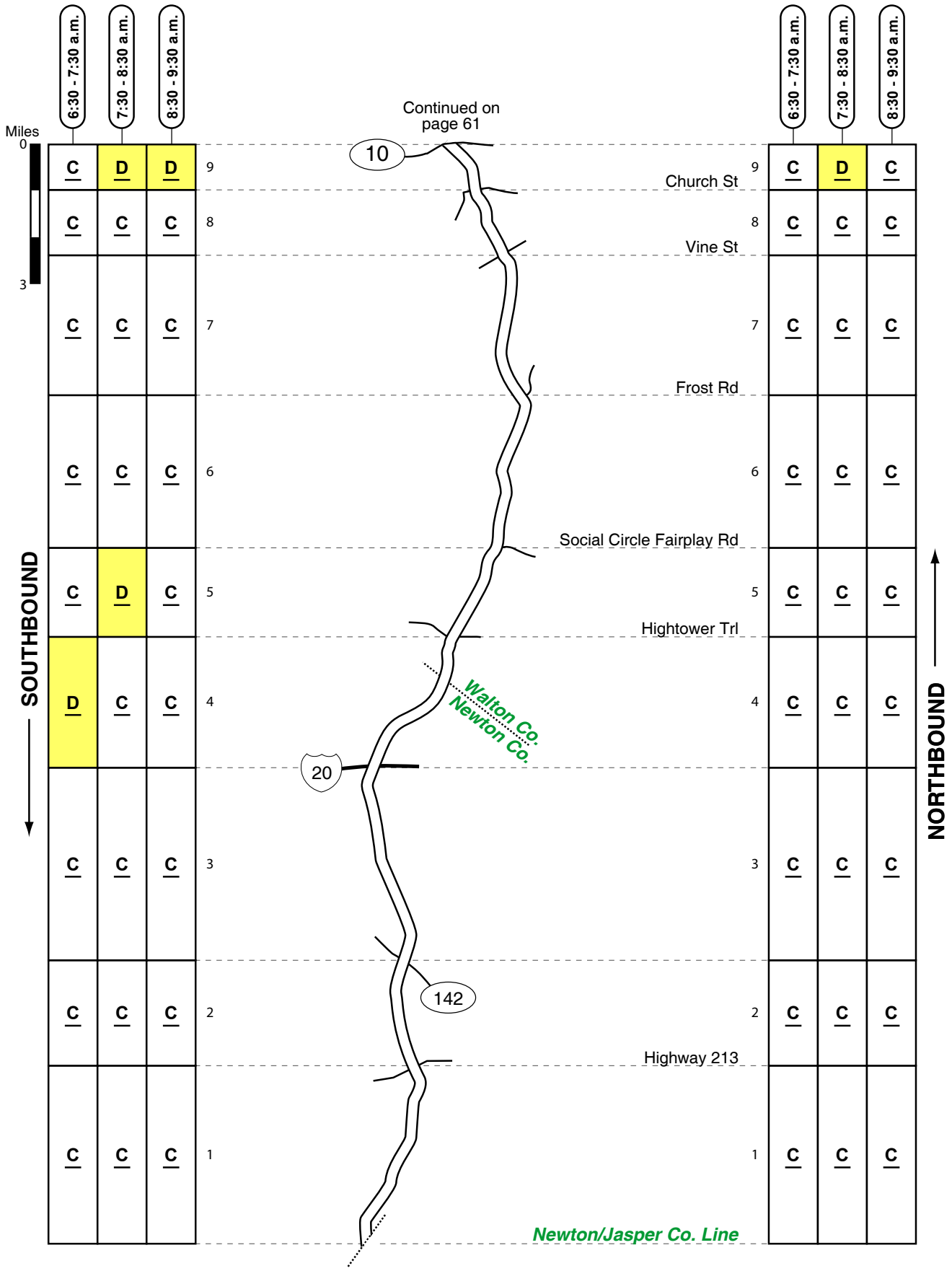
E
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 82
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: SR 81
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: One day only
Direction: Eastbound
Queue Population: 30 to 35 vpl
Number of Lanes: 1

Spring 2008

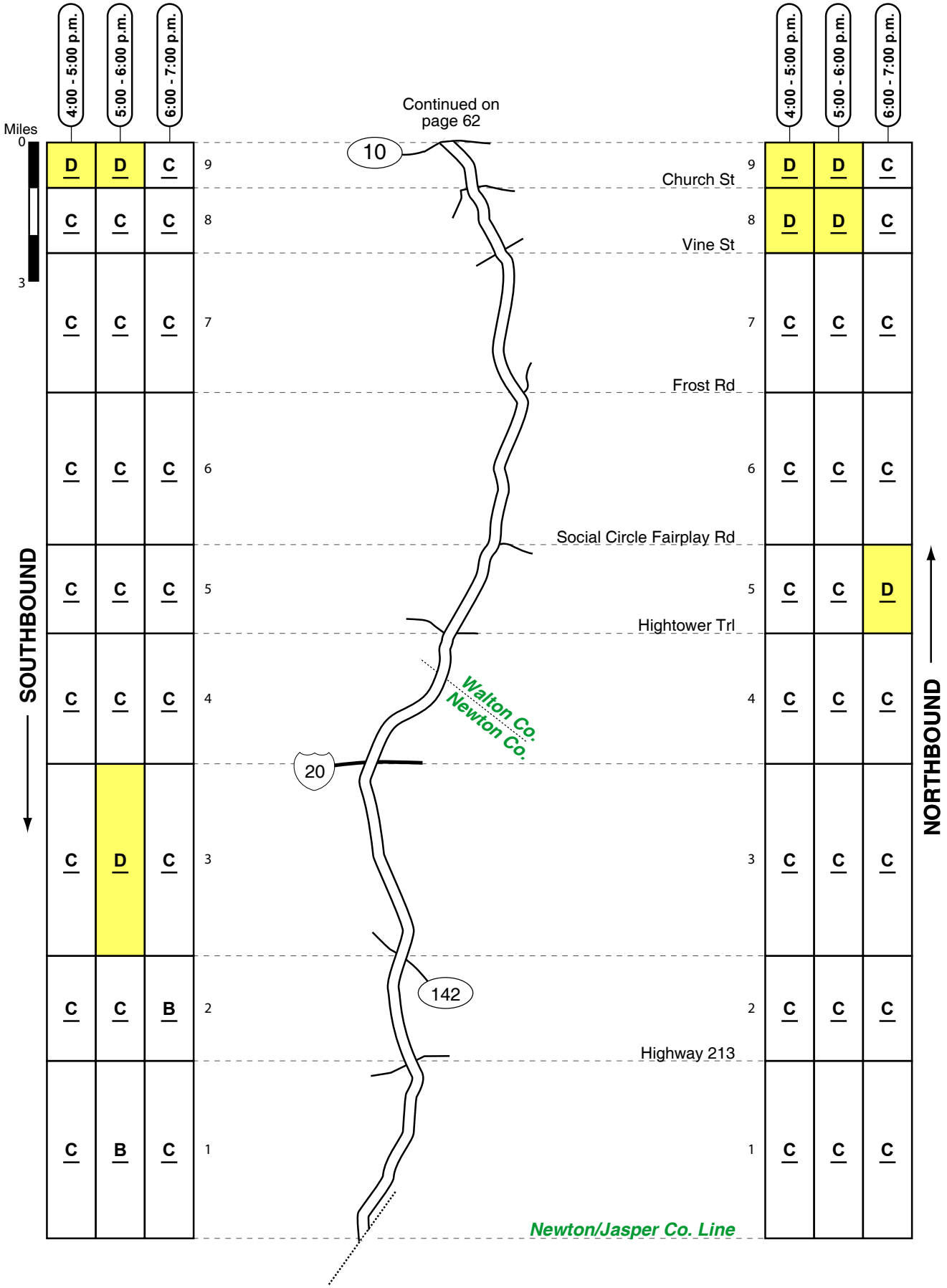
SR 11 (Barrow/Walton & Newton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 11 (Barrow/Walton & Newton Counties) - Evening

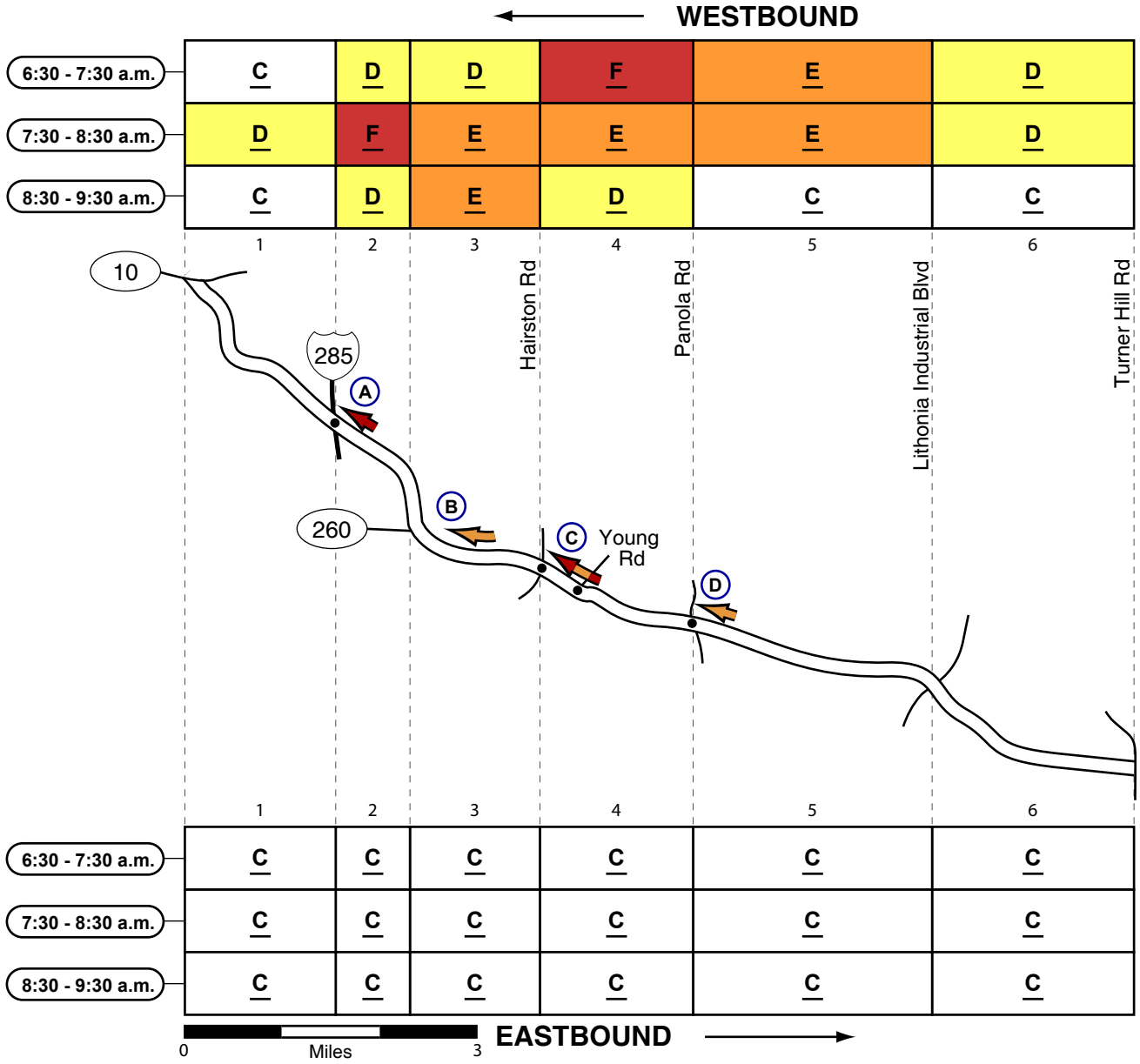
Continued on page 62



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 12 (Dekalb County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 12 (Dekalb County) - Morning

A
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: Congestion typically backed through the upstream signal at Margarette Dr.

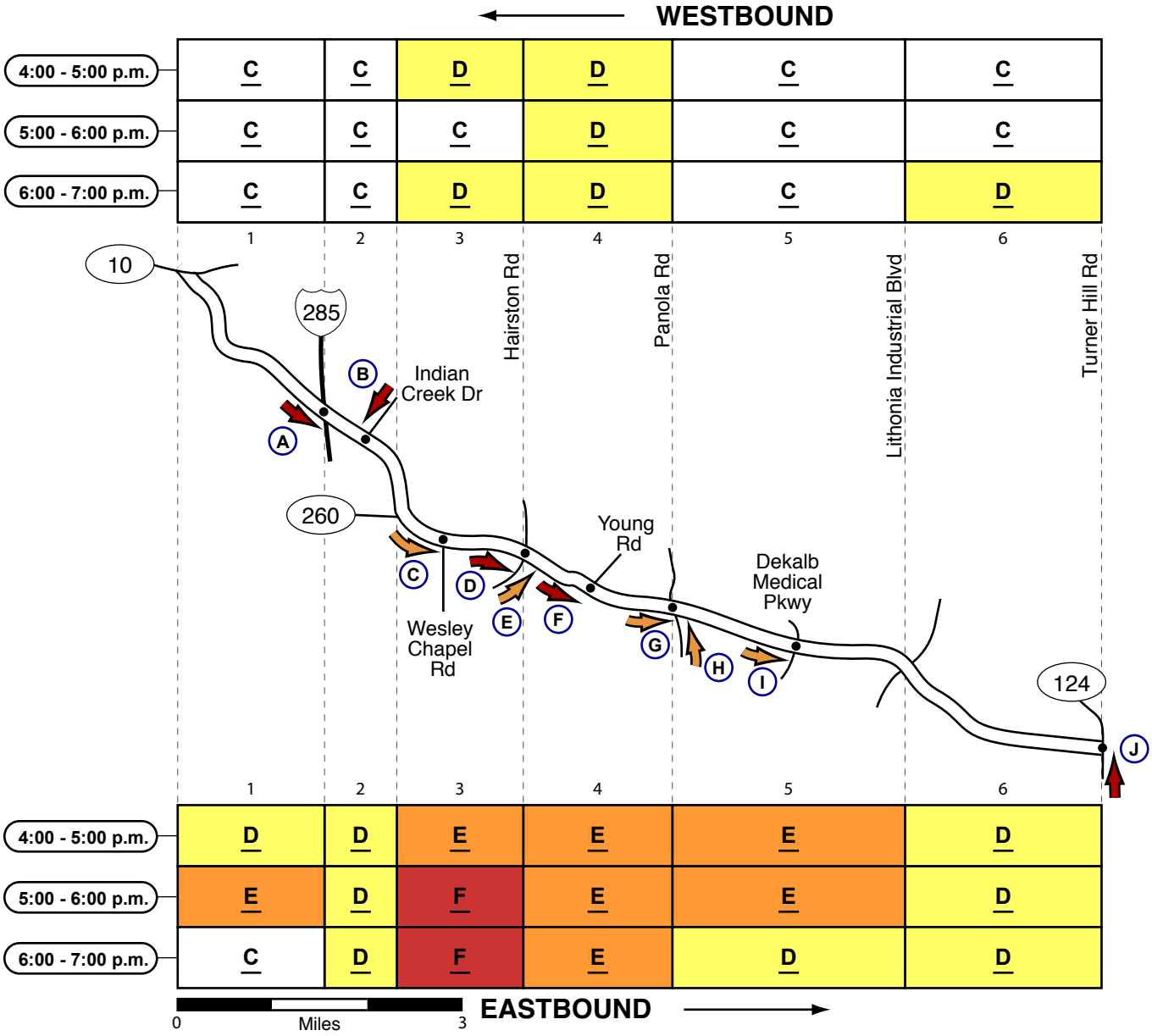
B
Congestion Type: Platoons
Location: Between Hairston Rd & SR 260
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Hairston Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 80 vpl
Number of Lanes: 2
Note: On some days but not others, congestion backed through the upstream signal at Young Rd.

D
Congestion Type: Mainline Signal Queue
Location: Panola Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Spring 2008

SR 12 (Dekalb County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 12 (Dekalb County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Eastbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2

B
Congestion Type: Cross Road Signal Queue
Location: Indian Creek Dr
Frequency: On some days but not others
Direction: Southbound
Queue Population: 40 to 50 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Wesley Chapel Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: Hairston Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

E
Congestion Type: Cross Road Signal Queue
Location: Hairston Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Young Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Panola Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

H
Congestion Type: Cross Road Signal Queue
Location: Panola Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: Dekalb Medical Parkway
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

J
Congestion Type: Cross Road Signal Queue
Location: SR 124 (Turner Hill Rd)
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion typically extended back onto the exit ramp from I-20 (westbound).

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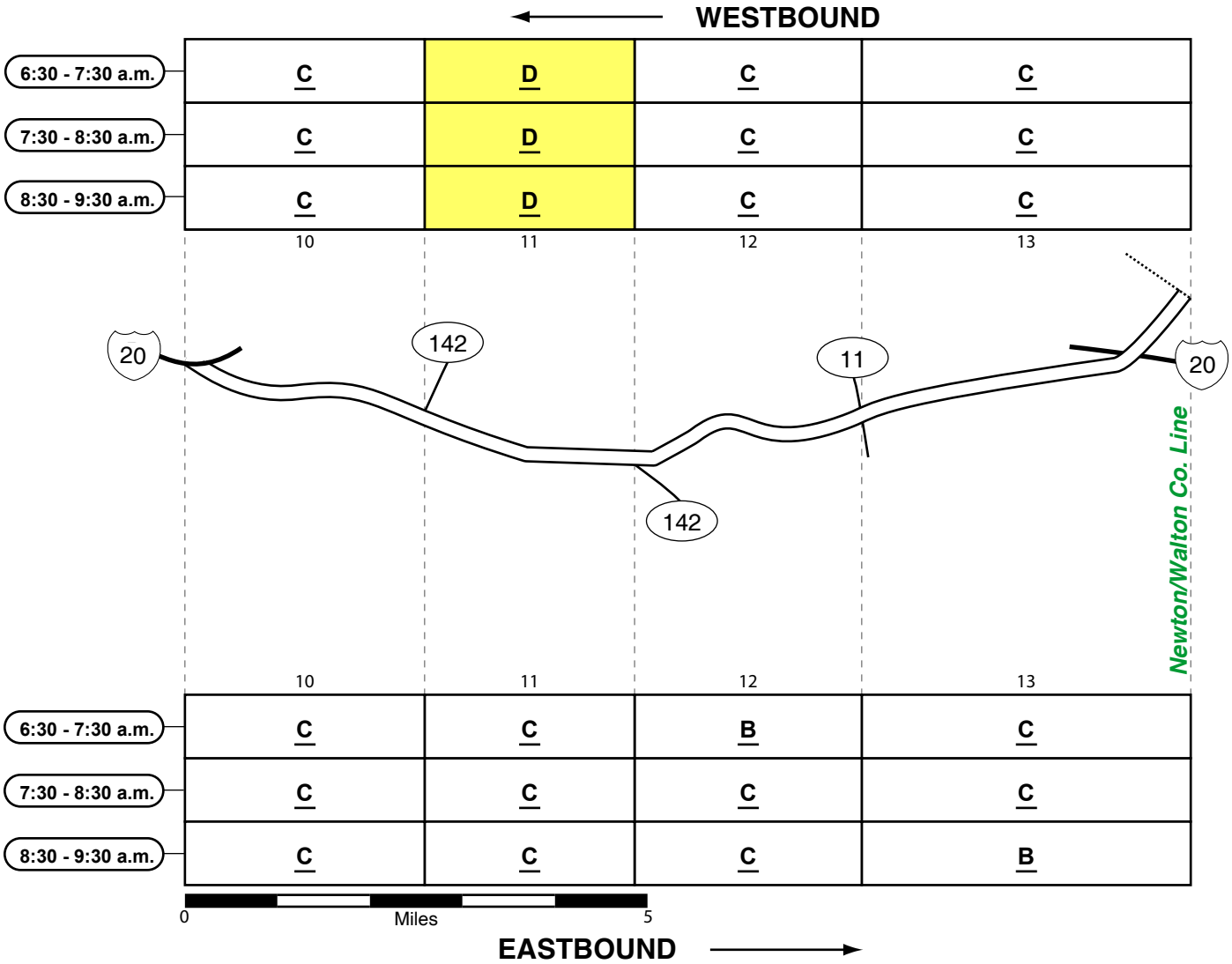
Spring 2008

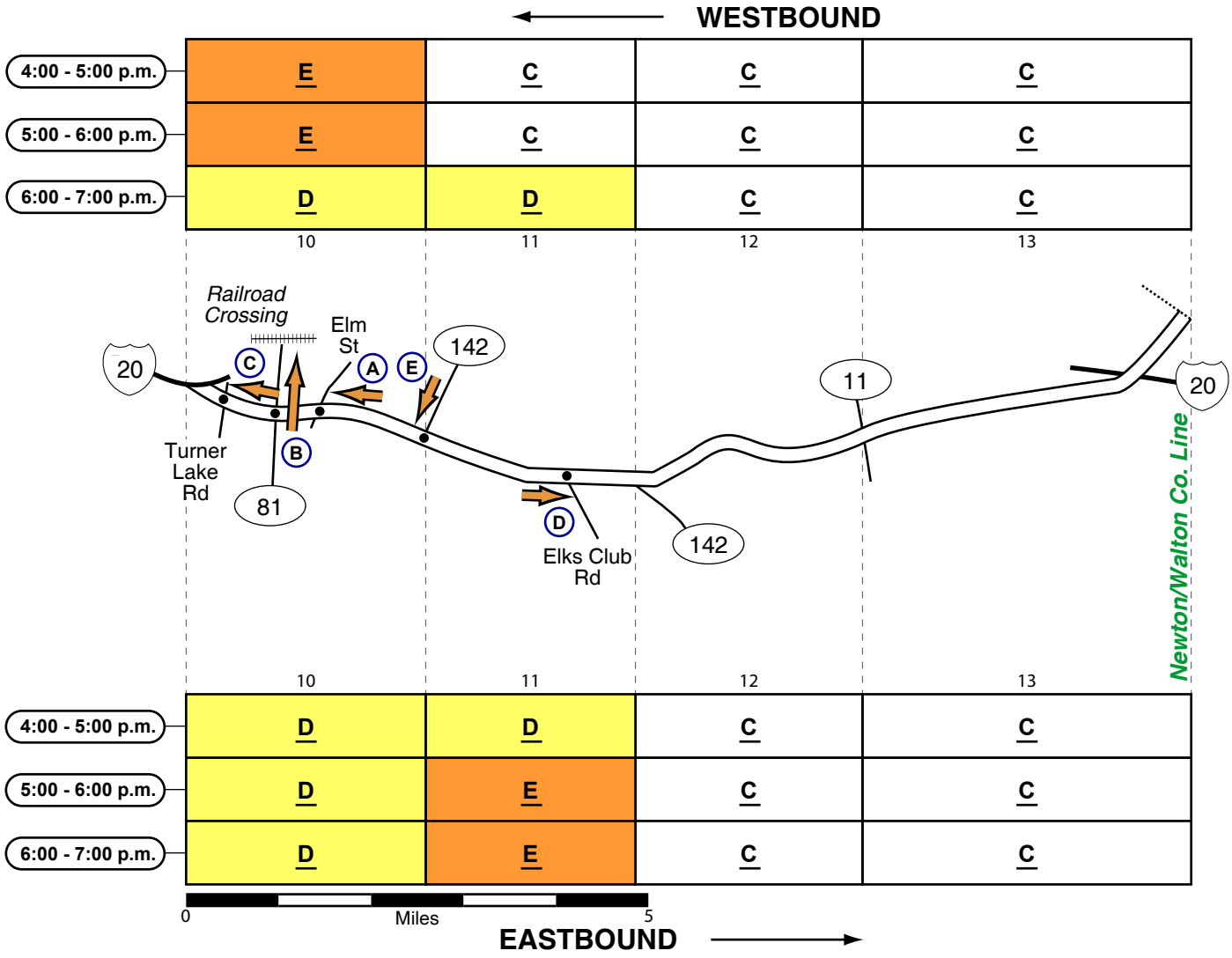
SR 12 (Newton County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 12 (Newton County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 12 (Newton County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Elm St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Railroad Crossing
Location: SR 81
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1
Note: Congestion at the railroad crossing backed through the upstream signal at SR 12.

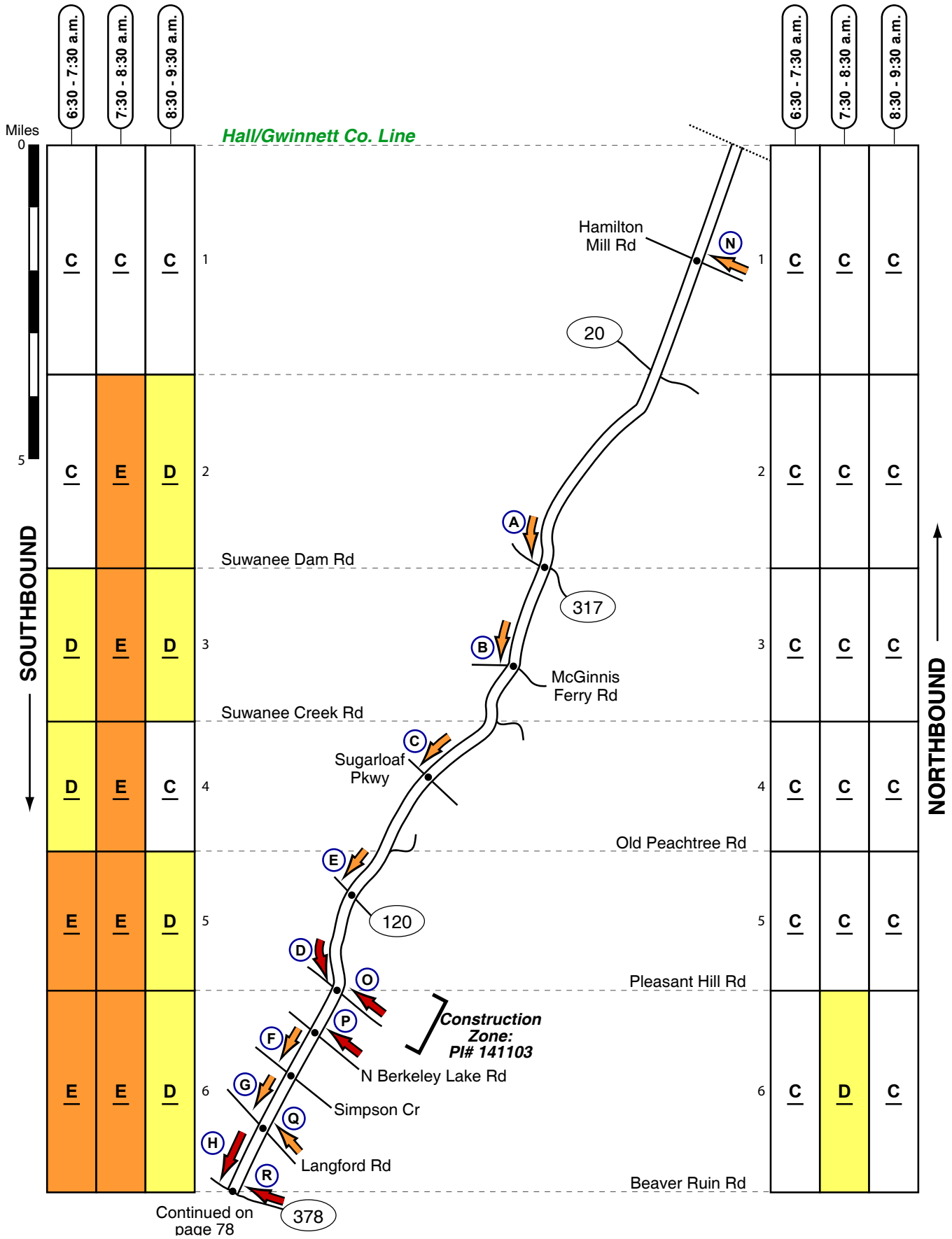
C
Congestion Type: Left-Turn Queue
Location: Turner Lake Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Elks Club Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: During one observation (March 18th at 5:41 p.m.), approximately 90 vehicles were queued at the signal.

E
Congestion Type: Cross Road Signal Queue
Location: SR 142
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 13 (Gwinnett County) - Morning



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 13 (Gwinnett County) - Morning

A
Congestion Type: Mainline Signal Queue
Location: SR 317
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: McGinnis Ferry Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Sugarloaf Pkwy
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Pleasant Hill Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 2
Note: During the spring 2008 aerial survey, the intersection at Pleasant Hill Rd was under construction (grade separation).

E
Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Simpson Circle
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Langford Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: SR 378
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

N
Congestion Type: Cross Road Signal Queue
Location: Hamilton Mill Rd
Frequency: One observation
Direction: Westbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

O
Congestion Type: Cross Road Signal Queue
Location: Pleasant Hill Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During the spring 2008 aerial survey, the intersection at SR 13 and Pleasant Hill Rd was under construction (grade separation).

P
Congestion Type: Cross Road Signal Queue
Location: Berkeley Lake Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1

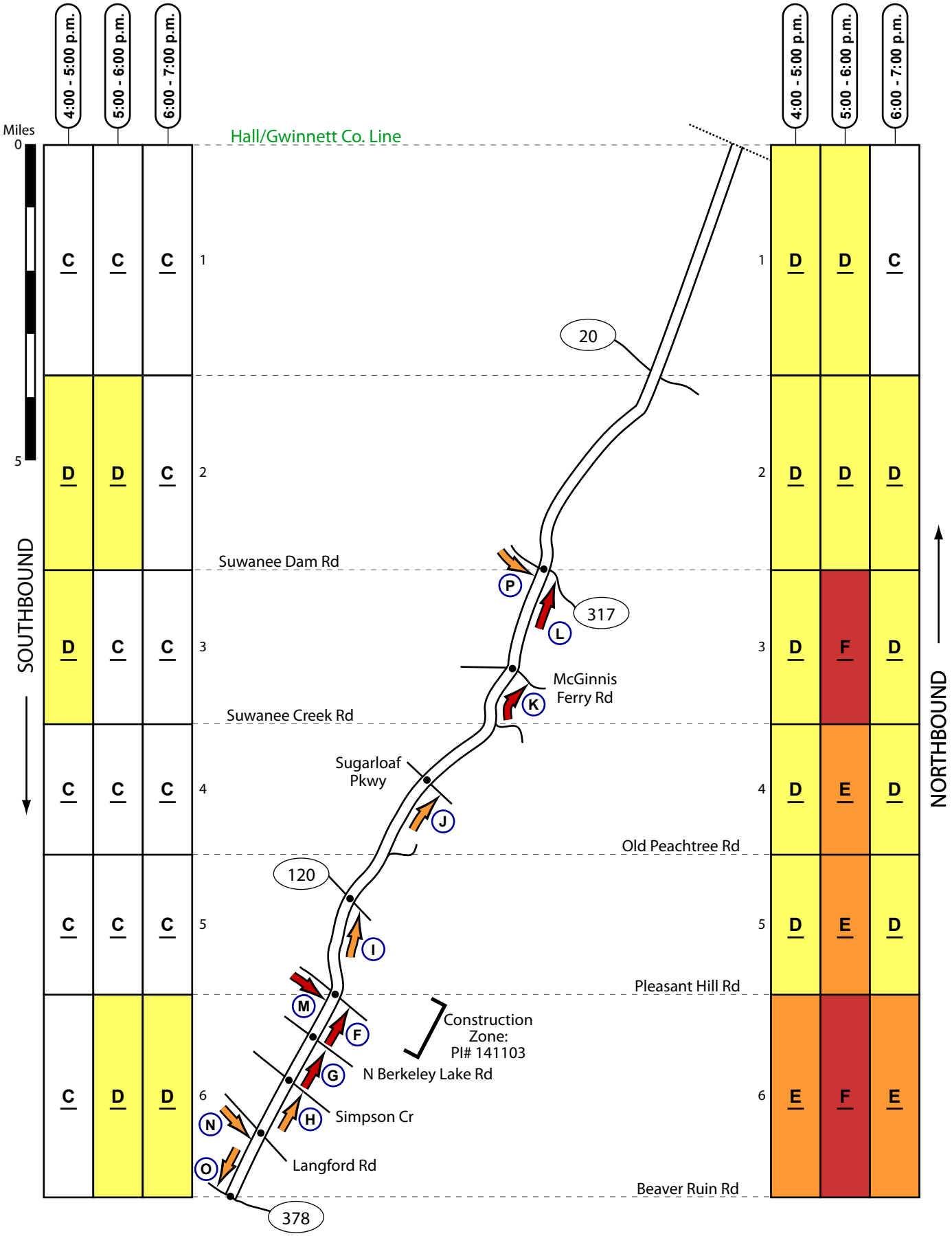
Q
Congestion Type: Cross Road Signal Queue
Location: Langford Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

R
Congestion Type: Cross Road Signal Queue
Location: SR 378
Frequency: Peak hour
Direction: Westbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2

Construction Zone
PI# 141103
Description: Interchange construction

Spring 2008

SR 13 (Gwinnett County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 13 (Gwinnett County) - Evening

F
Congestion Type: Mainline Signal Queue
Location: Pleasant Hill Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 20 to 75 vpl
Number of Lanes: 2
Note: During the spring 2008 aerial survey, the intersection at SR 13 and Pleasant Hill Rd was under construction (grade separation).

G
Congestion Type: Mainline Signal Queue
Location: Berkeley Lake Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: Simpson Circle
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: Sugarloaf Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

K
Congestion Type: Mainline Signal Queue
Location: McGinnis Ferry Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 75 vpl
Number of Lanes: 1

L
Congestion Type: Mainline Signal Queue
Location: SR 317
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 65 vpl
Number of Lanes: 1

M
Congestion Type: Cross Road Signal Queue
Location: Pleasant Hill Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

N
Congestion Type: Cross Road Signal Queue
Location: Langford Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

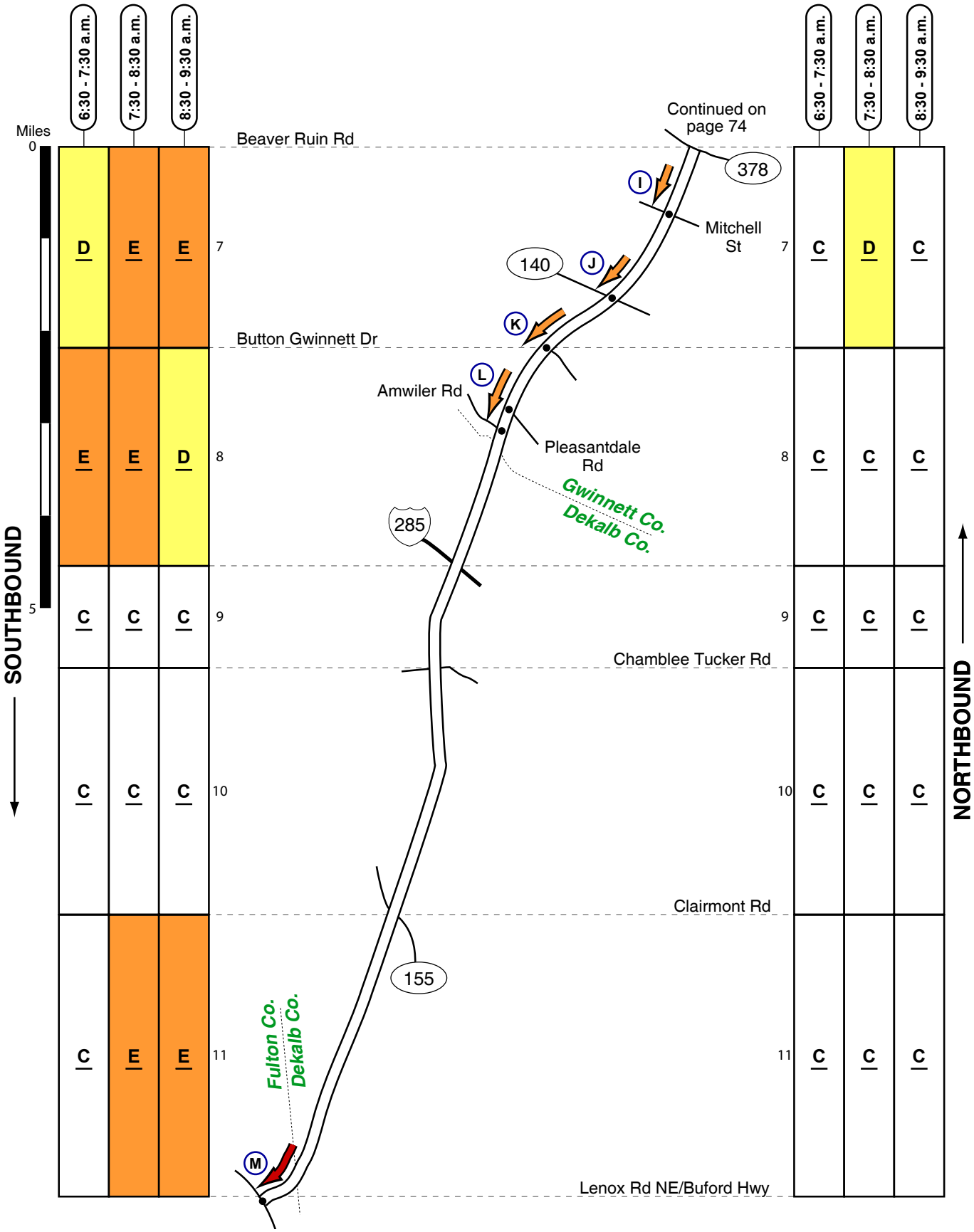
O
Congestion Type: Left-Turn Queue
Location: SR 378
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1
Note: When congested, congestion in the left-turn bay extended back into the right lane on SR 13.

P
Congestion Type: Cross Road Signal Queue
Location: Suwanee Dam Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Construction Zone
PI# 141103
Description: Interchange construction

Spring 2008

SR 13 (Gwinnett/Dekalb & Fulton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 13 (Gwinnett/Dekalb & Fulton Counties) - Morning

I
Congestion Type: Mainline Signal Queue
Location: Mitchell St
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

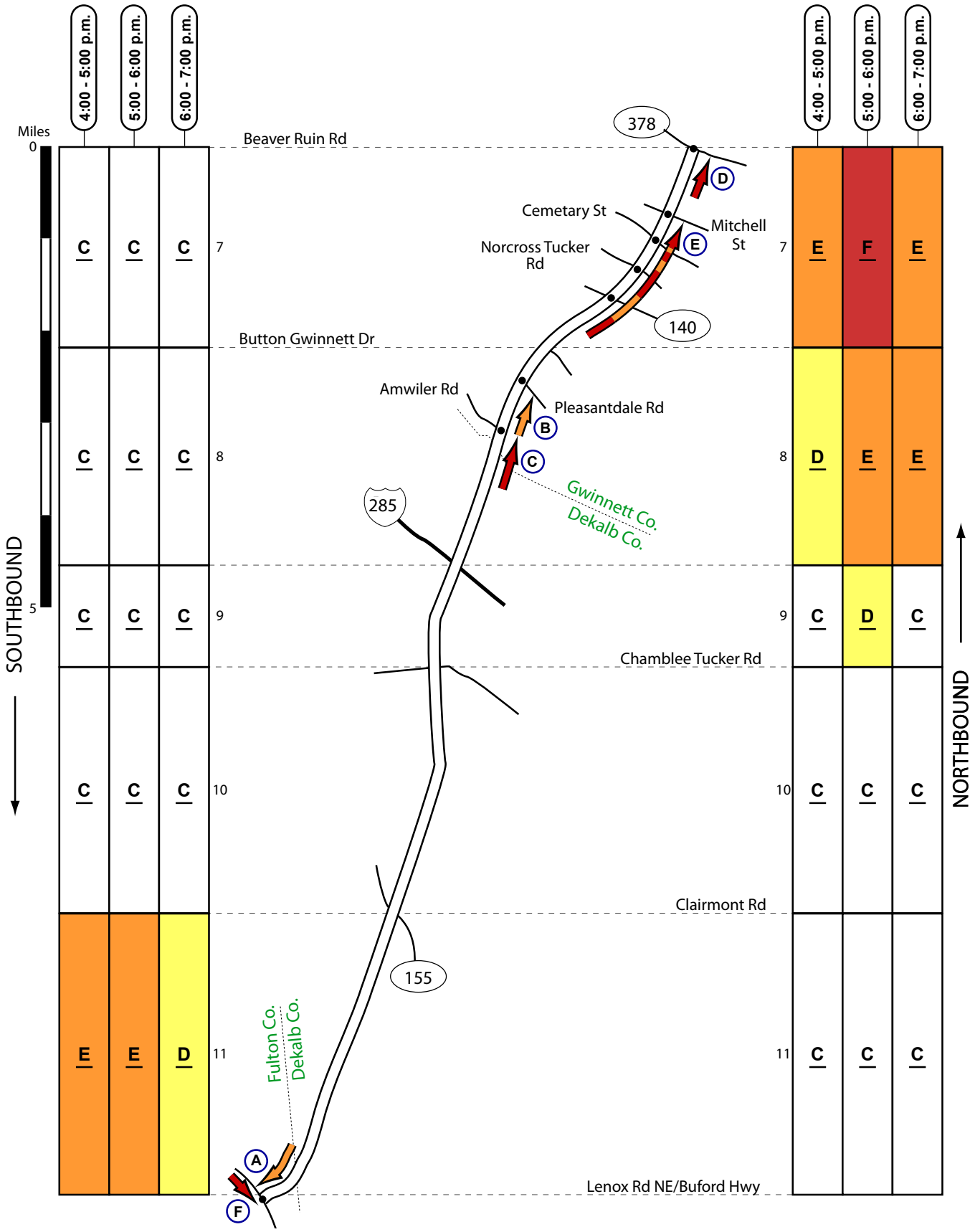
K
Congestion Type: Mainline Signal Queue
Location: Button Gwinnett Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2
Note: During some observations, congestion at Button Gwinnett Dr appeared to exacerbated by downstream congestion (congestion at Pleasantdale Rd backed through the signal at Button Gwinnett Rd).

L
Congestion Type: Mainline Signal Queue
Location: Amwiler Rd / Pleasantdale Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations congestion approaching Amwiler Rd extended back through the closely spaced upstream signal (200 yards) at Pleasantdale Rd.

M
Congestion Type: Mainline Signal Queue
Location: Lenox Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 3

Spring 2008

SR 13 (Gwinnett/Dekalb & Fulton Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 13 (Gwinnett/Dekalb & Fulton Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Lenox Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

B
Congestion Type: Mainline Signal Queue
Location: Pleasantdale Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Anwiler Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 25 to 50 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: SR 378
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Mitchell St
Frequency: Most observations
Direction: Northbound
Number of Lanes: 2
Note: During the peak period, northbound congestion approaching Mitchell St typically extended back through several upstream signals for a distance of approximately one mile; the upstream signals included Cemetery St, Norcross Tucker Rd and SR 140.

F
Congestion Type: Cross Road Signal Queue
Location: SR 884/ Lenox Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion in the two thru-lanes at the signal often extended back into the one-lane section of SR 884.

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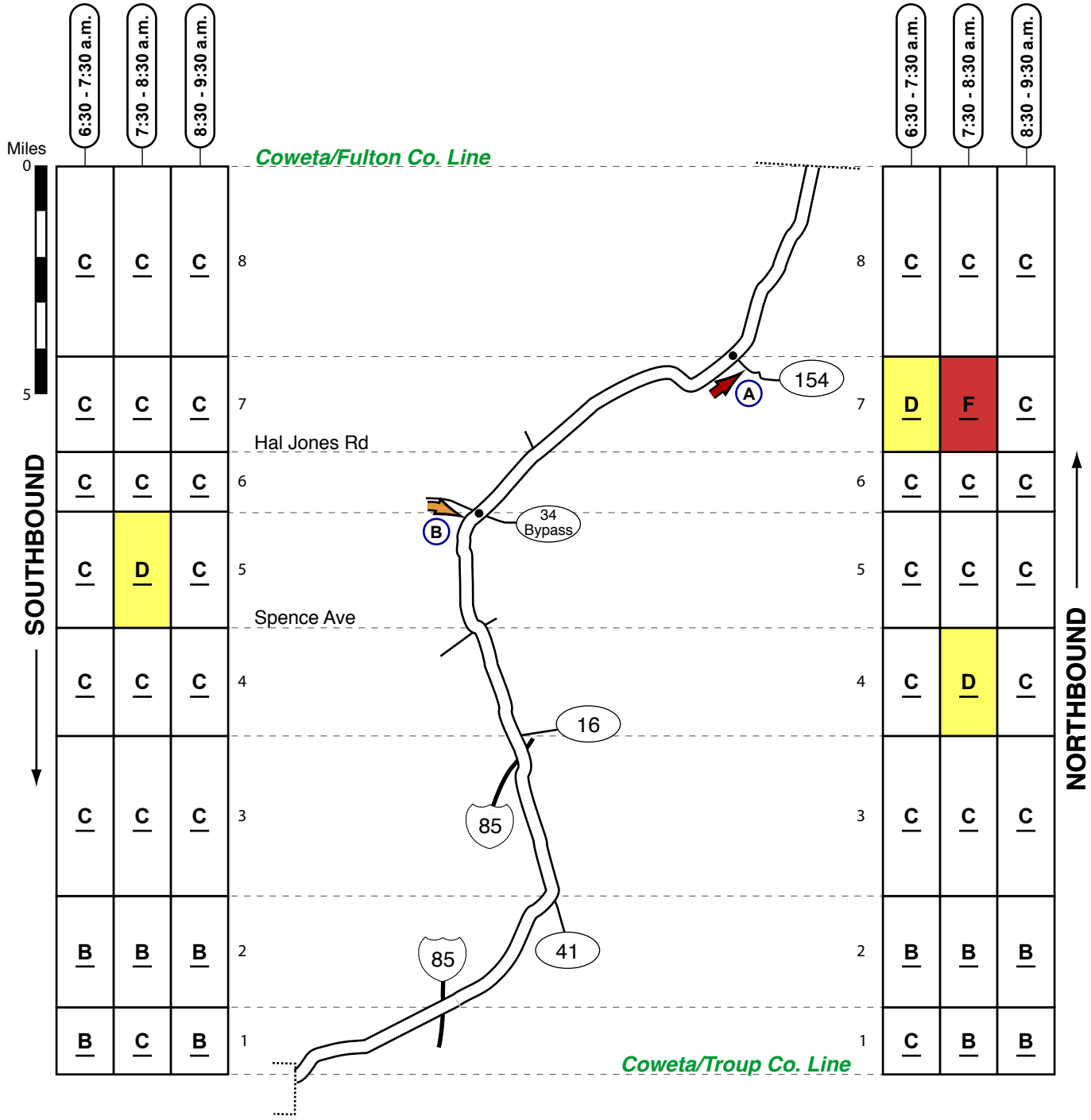
Spring 2008
SR 14 (Coweta County) - Morning



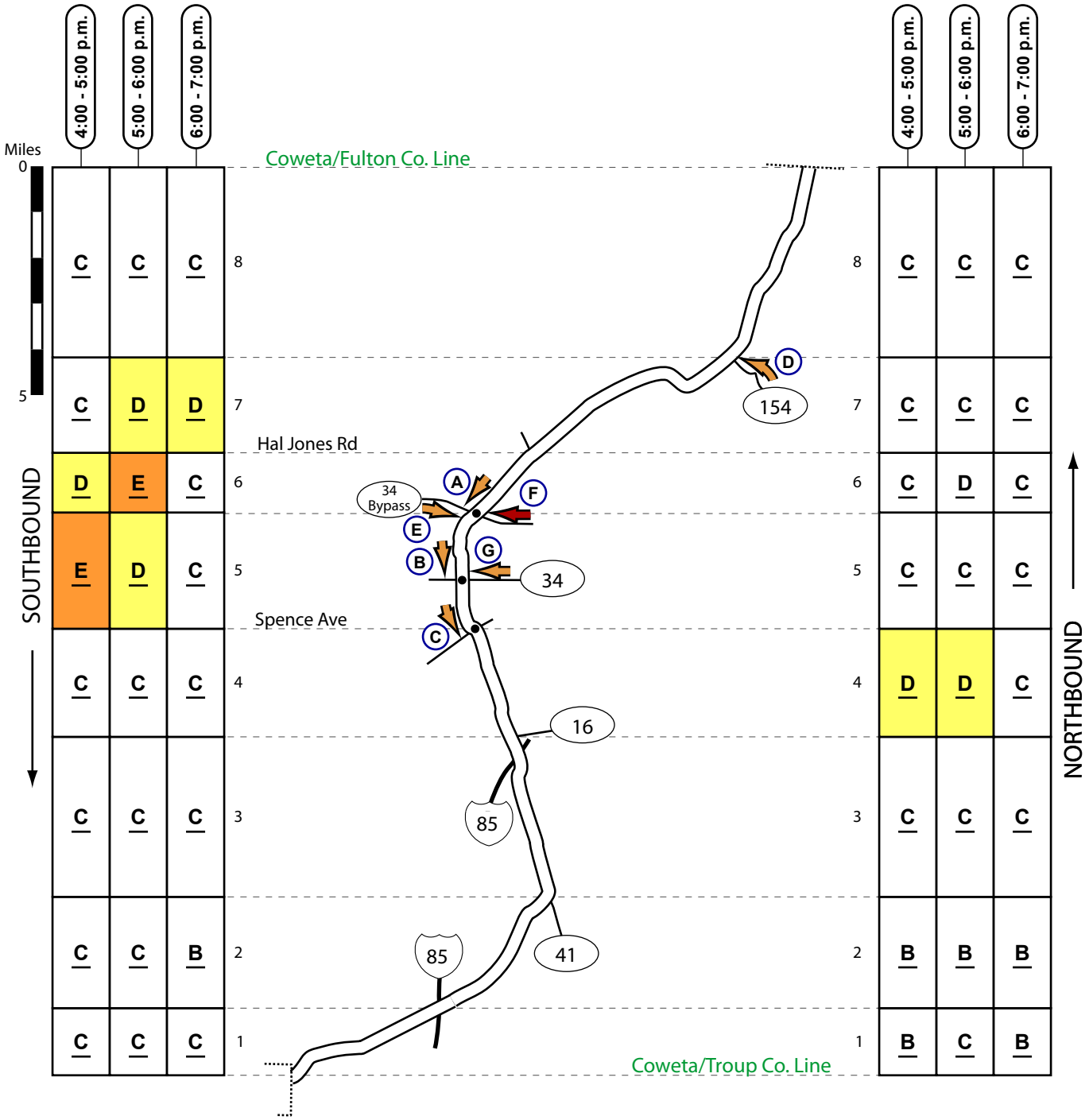
A
Congestion Type: Mainline Signal Queue
Location: SR 154
Frequency: Intermittent
Direction: Northbound
Queue Population: 40 to 45 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Signal Queue
Location: SR 34 Bypass
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 14 (Coweta County) - Evening



Segment	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.
8	C	C	C	C	C	C
7	C	D	D	C	C	C
6	D	E	C	C	D	C
5	E	D	C	C	C	C
4	C	C	C	D	D	C
3	C	C	C	C	C	C
2	C	C	B	B	B	B
1	C	C	C	B	C	B

Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 14 (Coweta County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 34 Bypass
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 34
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Spence Ave
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: SR 154
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: SR 34 Bypass
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: SR 34 Bypass
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1
Note: During one observation, the queue contained approximately 120 vehicles.

G
Congestion Type: Cross Road Signal Queue
Location: SR 34
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

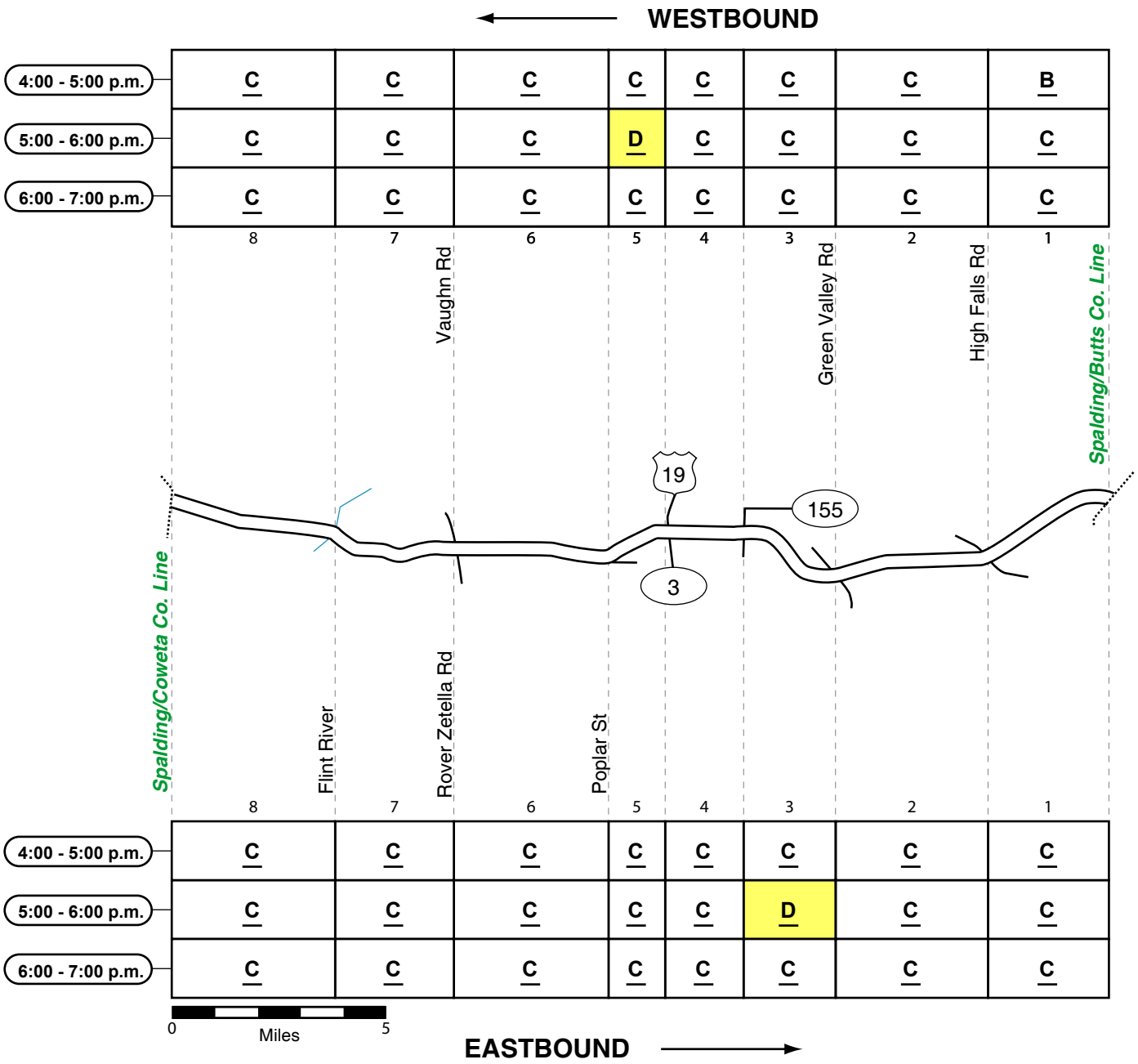
Spring 2008

SR 16 (Spalding County) - Morning

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

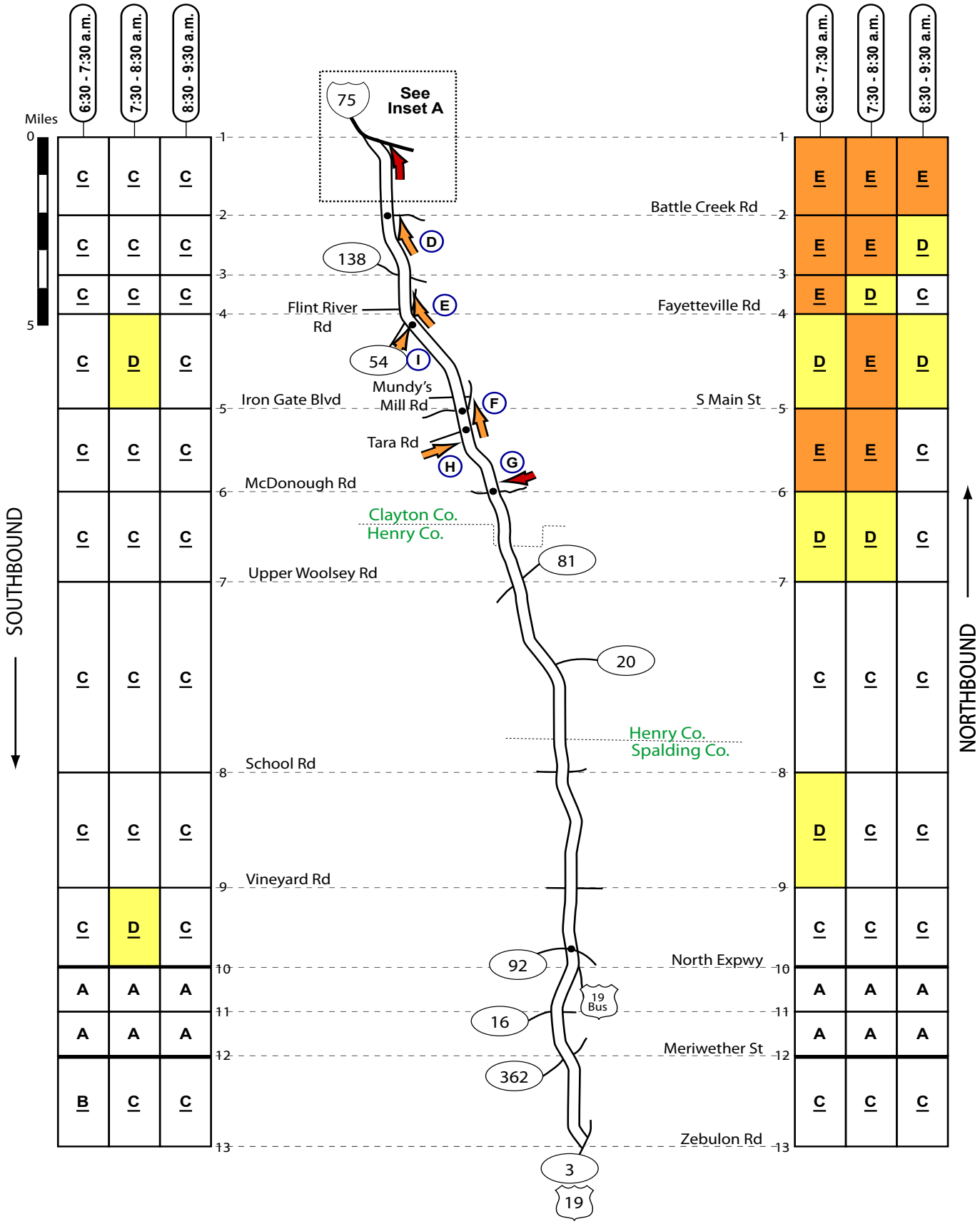
SR 16 (Spalding County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Morning

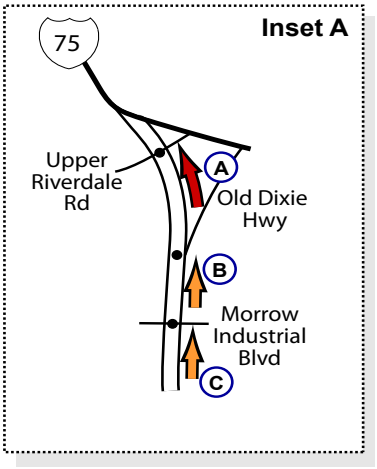


Segment	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
1	C	C	C	E	E	E
2	C	C	C	E	E	D
3	C	C	C	E	D	C
4	C	D	C	D	E	D
5	C	C	C	E	E	C
6	C	C	C	D	D	C
7	C	C	C	C	C	C
8	C	C	C	D	C	C
9	C	D	C	C	C	C
10	A	A	A	A	A	A
11	A	A	A	A	A	A
12	B	C	C	C	C	C
13						

Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Morning



A
Congestion Type: Signal Queue
Location: Upper Riverdale Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: Old Dixie Hwy
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 3

C
Congestion Type: Signal Queue
Location: Morrow Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 4

D
Congestion Type: Signal Queue
Location: Battle Creek Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

E
Congestion Type: Platoons
Location: Between Mundy's Mill Rd and SR 138
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 3

F
Congestion Type: Signal Queue
Location: Iron Gate Blvd / S. Main St
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

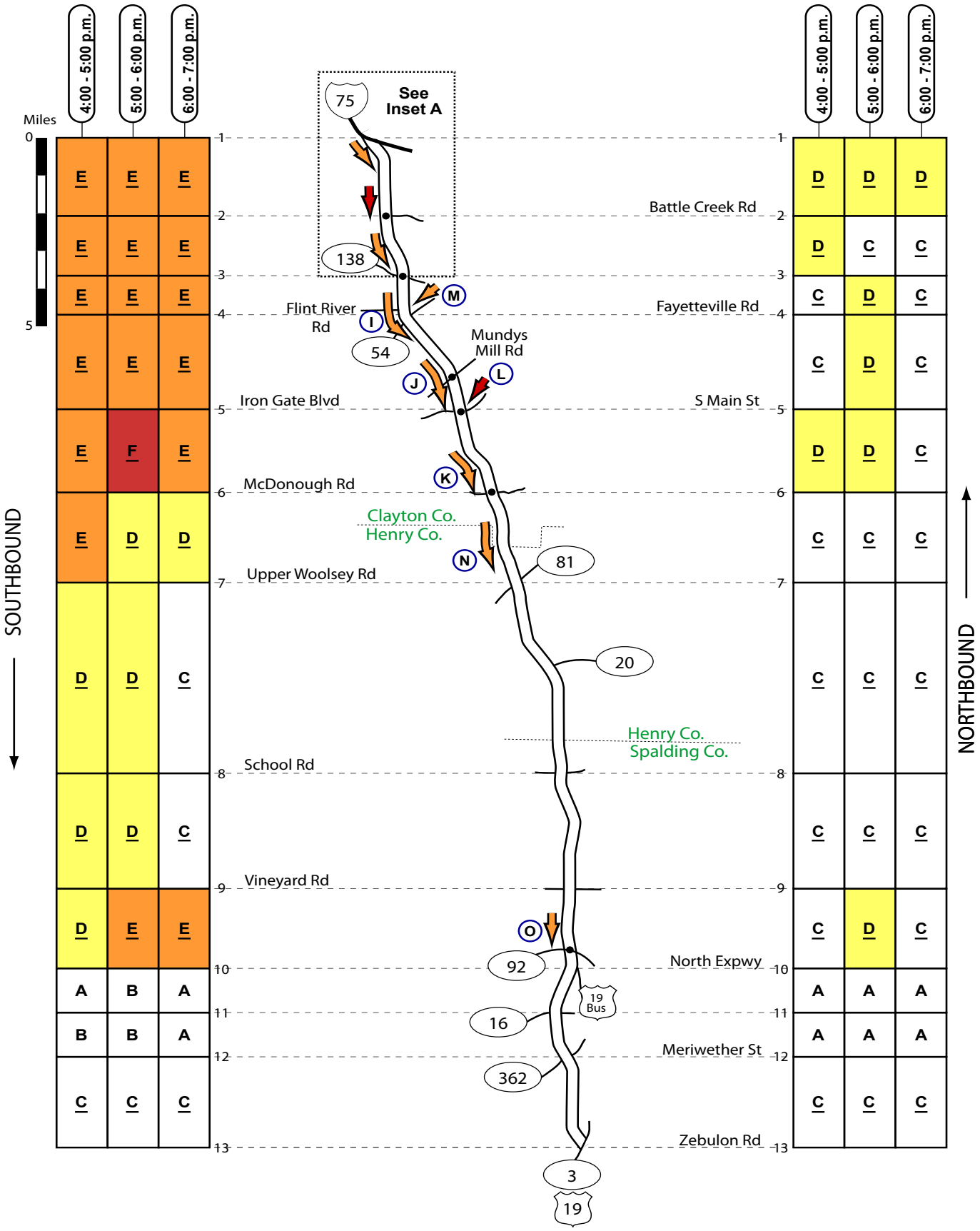
G
Congestion Type: Congested Cross Road
Location: SR 3 (McDonough Rd)
Frequency: Peak Hour
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

H
Congestion Type: Congested Cross Road
Location: Tara Rd
Frequency: Intermittent (before 7:30 a.m.)
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

I
Congestion Type: Congested Cross Road
Location: SR 54 (Fayetteville Rd)
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

Fall 2007

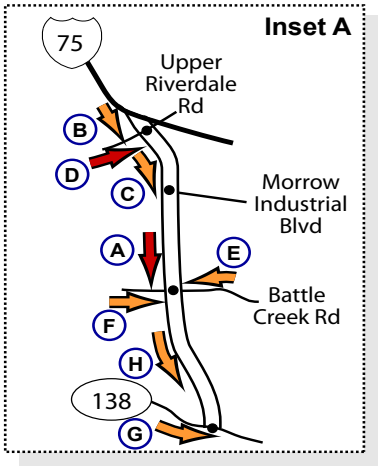
SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Evening



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 3/US 19/41 (Clayton/Henry & Spalding Counties) - Evening



A
Congestion Type: Signal Queue
Location: Battle Creek Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

B
Congestion Type: Signal Queue
Location: Upper Riverdale Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

C
Congestion Type: Signal Queue
Location: Morrow Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

D
Congestion Type: Congested Cross Road
Location: Upper Riverdale Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

E
Congestion Type: Congested Cross Road
Location: Battle Creek Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

F
Congestion Type: Congested Cross Road
Location: Battle Creek Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

G
Congestion Type: Congested Cross Road
Location: SR 138
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Platoons
Location: Between Battle Creek Rd & SR 138
Frequency: Most observations
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 3

I
Congestion Type: Platoons
Location: Between SR 138 & SR 54
Frequency: Most observations
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 3

J
Congestion Type: Platoons
Location: Between Flint River Rd & Iron Gate Blvd
Frequency: Most observations
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2
Note: During two observations on one of the evenings surveyed, extensive southbound congestion was found approaching the signals at Mundys Mill Rd and Iron Gate Blvd; this may have been an anomally as similar congestion was not found during any other observation.

K
Congestion Type: Signal Queue
Location: SR 3 (McDonough Rd)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2

L
Congestion Type: Congested Cross Road
Location: S. Main St
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 1

M
Congestion Type: Congested Cross Road
Location: Fayetteville Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two dedicated left-turn lanes.

N
Congestion Type: Platoons
Location: Between SR 3 & SR 81
Frequency: Intermittent
Direction: Southbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2

O
Congestion Type: Signal Queue
Location: SR 92 (McIntosh Rd)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2
Note: During one observation, approximately 40 vehicles per lane (two lanes) were queued at the signal; otherwise, observed queue populations ranged from 20 to 25 vehicles per lane.

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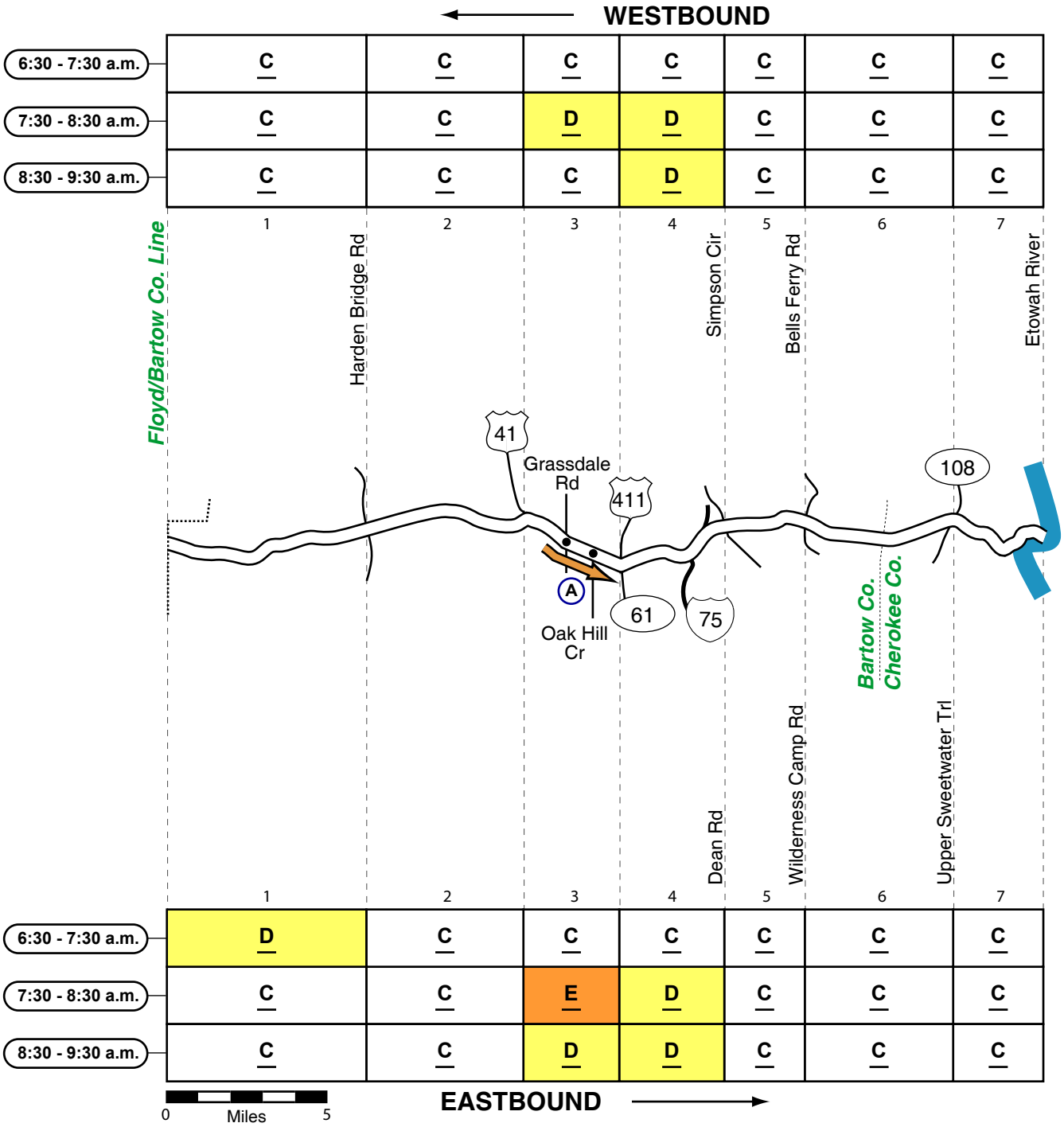
Spring 2008

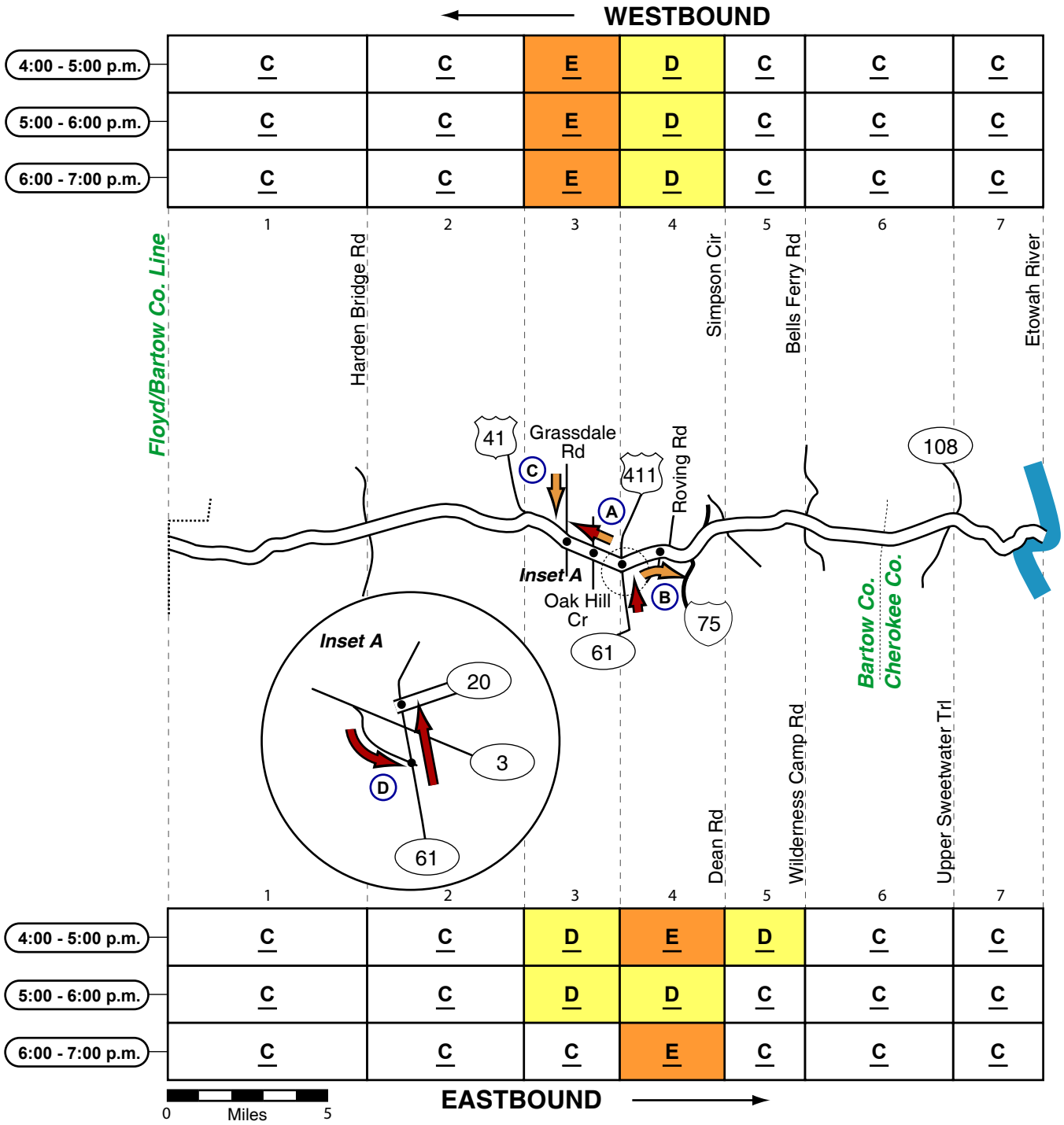
SR 20 (Bartow & Cherokee Counties) - Morning



A
Congestion Type: Platoons
Location: Vicinity of Grassdale Rd & Oak Hill Circle
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

Spring 2008

SR 20 (Bartow & Cherokee Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Bartow & Cherokee Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Grassdale Rd & Oak Hill Circle
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: Intermittent westbound congestion was found at the two closely spaced signals at Oak Hill Circle and Grassdale Rd.

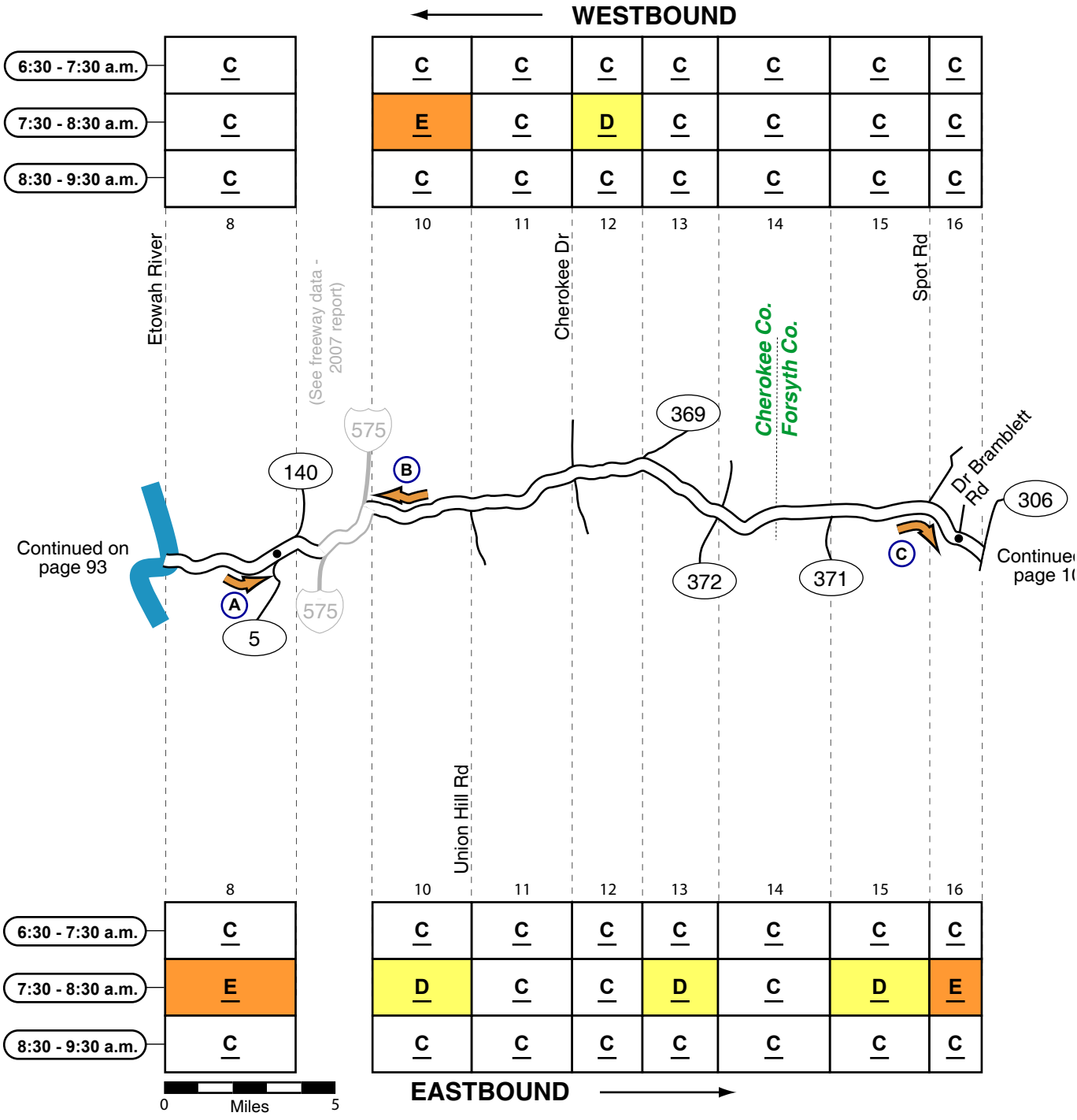
B
Congestion Type: Platoons
Location: Between SR 61 & I-75
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 1
Note: During one observation, approximately 30 vehicles were queud at the signal at Roving Rd.

C
Congestion Type: Cross Road Signal Queue
Location: Grassdale Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: SR 61
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: During some observations, northbound congestion on SR 61 appeared to adversely affect queuing on the SR 3 southbound exit ramp; it appeared that a limited number of vehicles on the ramp could clear the signal during the green phase due to the merge into congestion on SR 61.

Spring 2008

SR 20 (Cherokee & Forsyth Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Cherokee & Forsyth Counties) - Morning

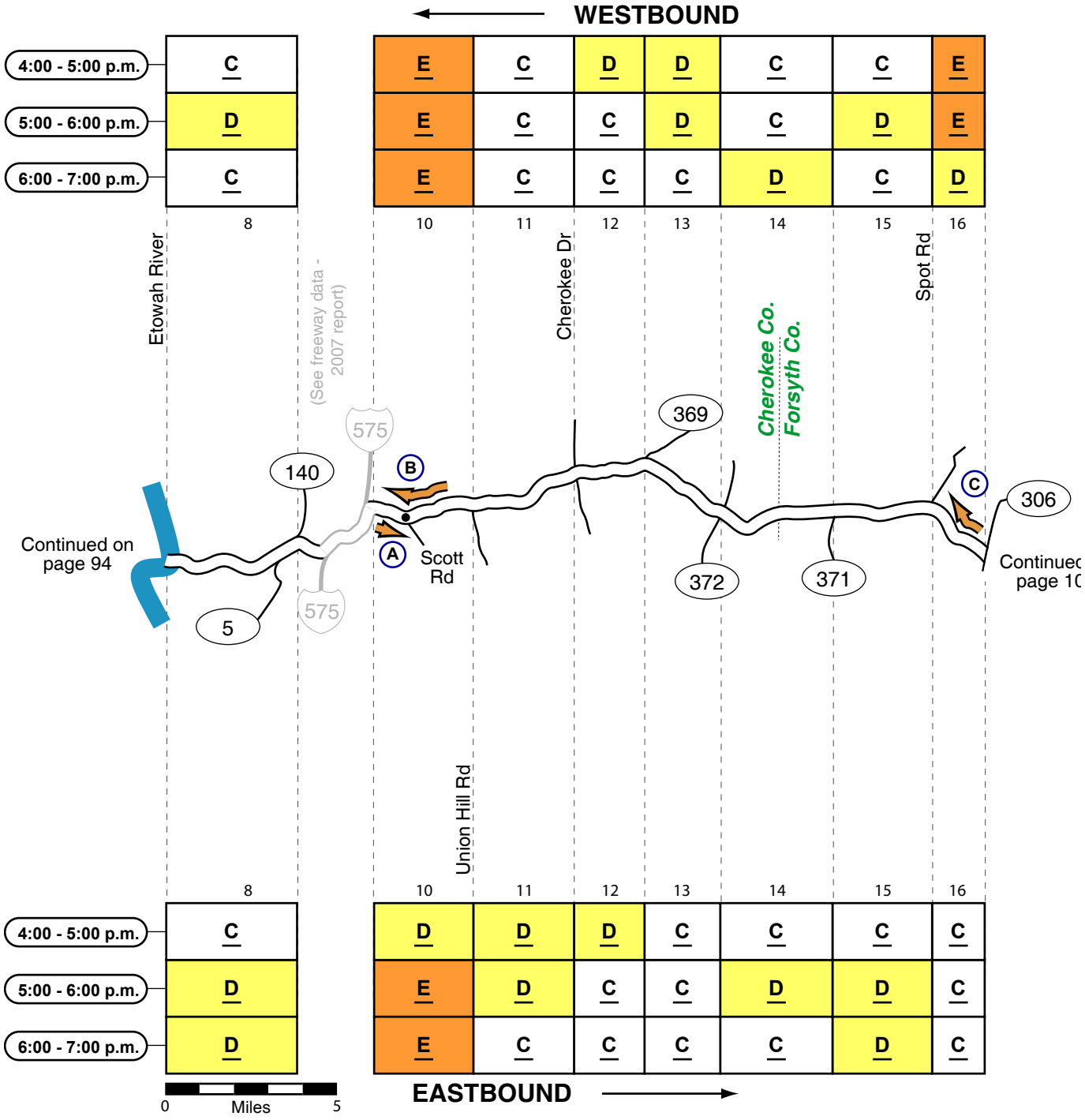
A
Congestion Type: Mainline Signal Queue
Location: SR 5
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between Union Hill Rd and I-575
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 30 to 50 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Dr Bramblett Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 20 (Cherokee & Forsyth Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Cherokee & Forsyth Counties) - Evening

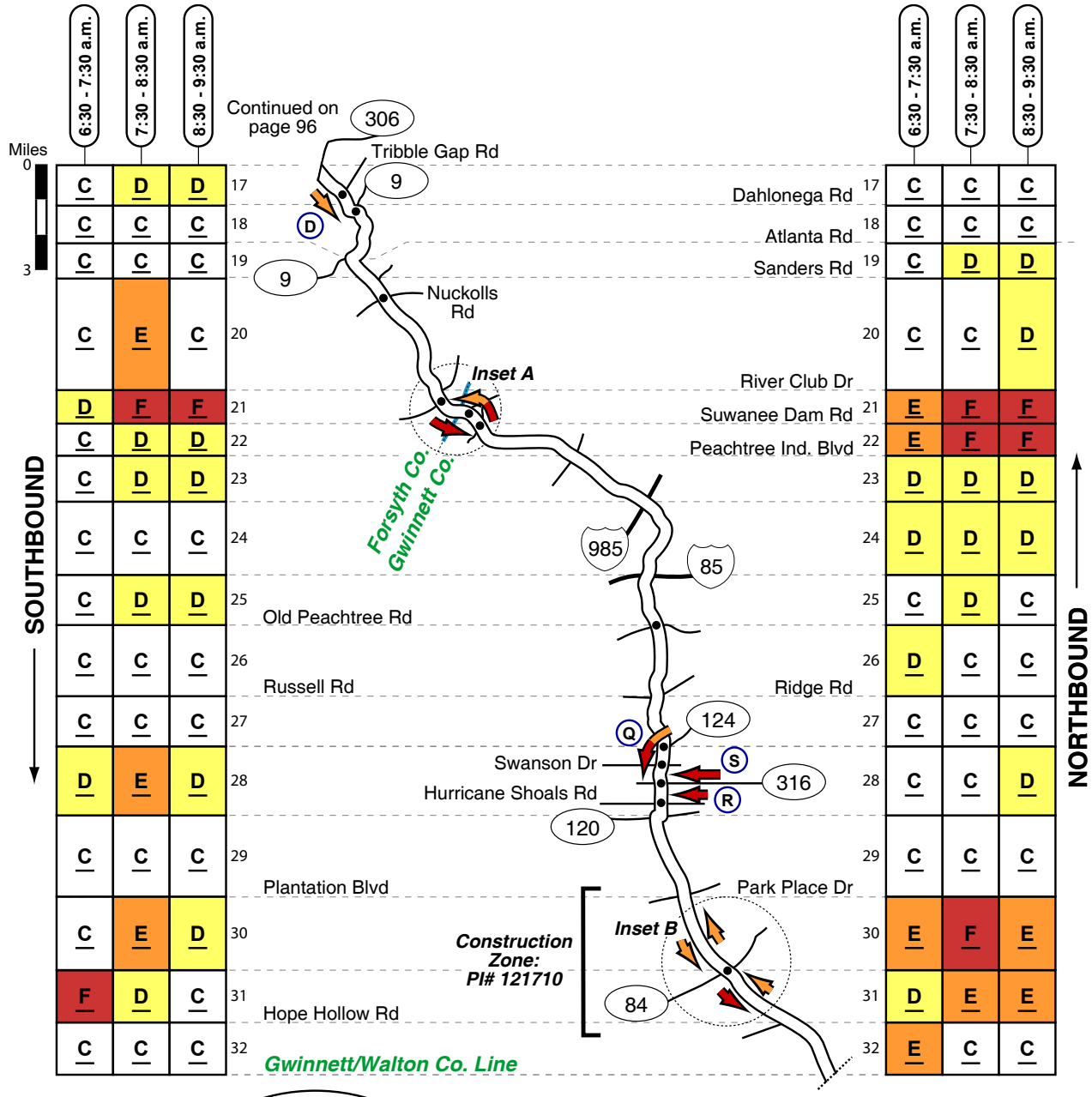
A
Congestion Type: Mainline Signal Queue
Location: Scott Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between Union Hill Rd & I-575
Frequency: Most observations
Direction: Westbound
Platoon Population: 25 to 50 vpl
Number of Lanes: 1

C
Congestion Type: Platoons
Location: Between SR 306 and Spot Rd
Frequency: Most observations before 6:00 p.m.
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

Spring 2008

SR 20 (Forsyth & Gwinnett Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Forsyth & Gwinnett Counties) - Morning

D
Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2
Note: Congestion was typically limited to the right lane. During one observation (March 5th at 9:22 a.m.), congestion backed through the upstream signal at Tribble Gap Rd.

E
Congestion Type: Mainline Signal Queue
Location: James Burgess Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 30 to 80 vpl
Number of Lanes: 1
Note: Intermittently during the peak period, congestion backed through the upstream signal at River Club Dr.

F
Congestion Type: Mainline Queue/Platoons
Location: Between Riverside Rd & James Burgess Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1
Note: Factors contributing to the congestion were: 1) the signal at James Burgess Rd; 2) the bridge at the Chattahoochee River and; 3) traffic entering at Riverside Rd.

G
Congestion Type: Mainline Signal Queue
Location: Suwanee Dam Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 30 to 100 vpl
Number of Lanes: 1
Note: During the peak period, a 1 to 1.5 mile zone of congestion was found approaching the signal at Suwanee Dam Rd; congestion typically extended back through the upstream signal at Riverside Rd.

H
Congestion Type: Cross Road Signal Queue
Location: Riverside Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

I
Congestion Type: Mainline Signal Queue
Location: Riverside Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 25 to 100 vpl
Number of Lanes: 1
Note: During some observations, congestion extended back through the upstream signal at Suwanee Dam Rd

J
Congestion Type: Mainline Signal Queue
Location: Suwanee Dam Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 25 to 130 vpl
Number of Lanes: 1

K
Congestion Type: Mainline Queue
Location: Webb Gin House Rd
Frequency: Most observations
Direction: Northbound
Number of Lanes: 1
Note: During the peak period, a one to two mile zone of northbound congestion was found between SR 84 and Webb Gin House Rd; factors contributing to the congestion were: 1) ongoing construction (roadway widening) along this corridor and; 2) the signals at Webb Gin House Rd, Hillside Dr, Sosebee Farm Rd and Rosebud Rd.

L
Congestion Type: Mainline Signal Queue
Location: Rosebud Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Ongoing construction between Webb Ginn House Rd and Cooper Rd may have contributed to the congestion (roadway widening).

M
Congestion Type: Platoons
Location: Between Cooper Rd & SR 84
Frequency: Most observations after 7:30 a.m.
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1
Note: Ongoing construction between Cooper Rd and Webb Ginn House Rd may have contributed to the congestion (roadway widening).

N
Congestion Type: Mainline Signal Queue
Location: Cooper Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

O
Congestion Type: Mainline Signal Queue
Location: Hope Hollow Rd
Frequency: Before 7:00 a.m.
Direction: Southbound
Queue Population: 40 to 80 vpl
Number of Lanes: 1
Note: The head of the queue was found on Hope Hollow Rd where traffic turned left into Grayson High School.

P
Congestion Type: Mainline Signal Queue
Location: Hope Hollow Rd
Frequency: Before 7:00 a.m.
Direction: Northbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1
Note: The head of the queue was found on Hope Hollow Rd where traffic turned left into Grayson High School.

Q
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations between 7:00 & 8:00 a.m.
Direction: Southbound
Queue Population: 25 to 75 vpl
Number of Lanes: 2
Note: During one observation, congestion backed through the upstream signals at Swanson Dr and the SR 20/SR 124 merge.

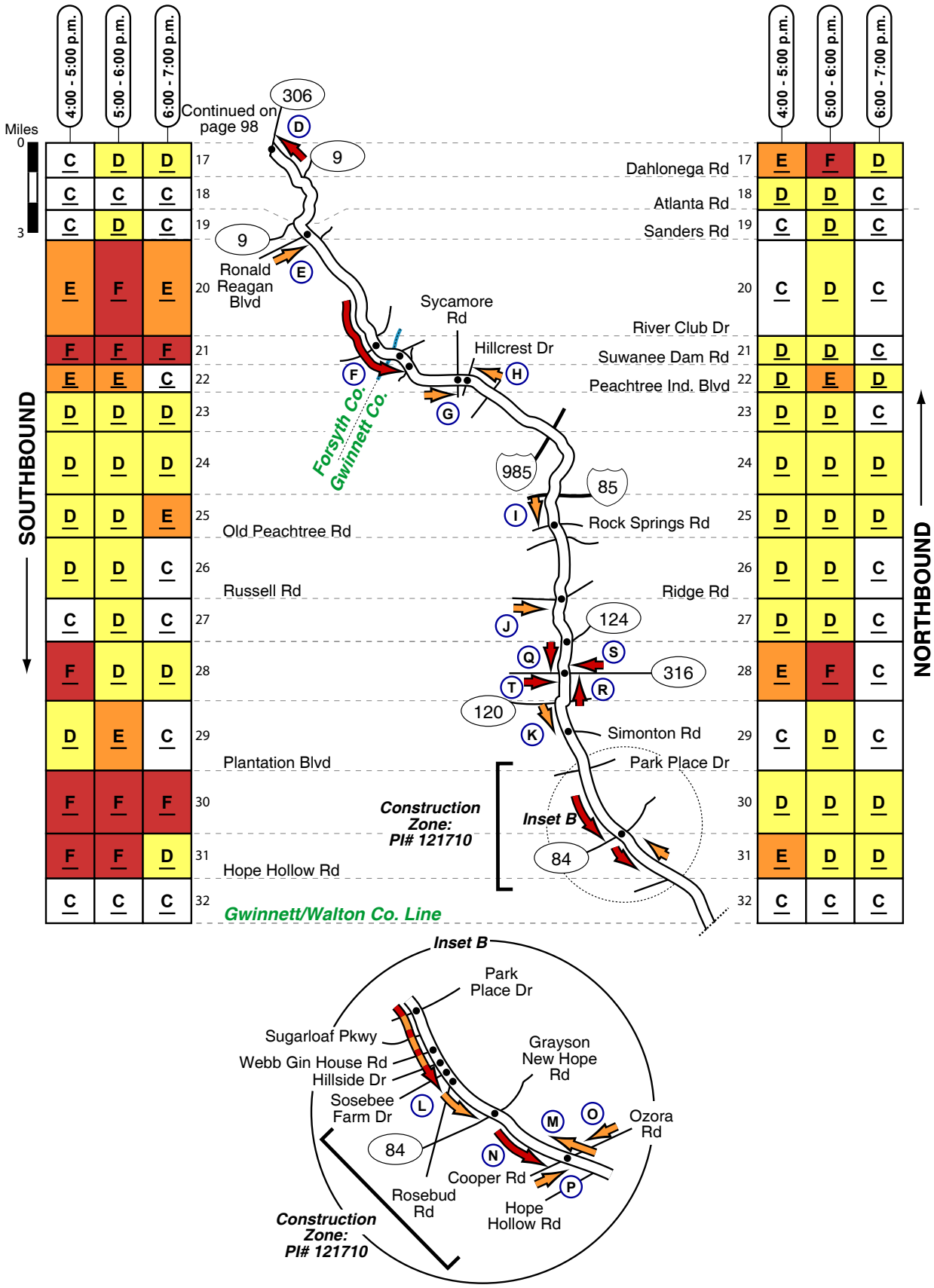
R
Congestion Type: Cross Road Signal Queue
Location: Hurricane Shoals Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

S
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Westbound
Queue Populations: 25 to 70 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Construction Zone
PI# 121710
Description: Roadway Widening

Spring 2008

SR 20 (Forsyth & Gwinnett Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Forsyth & Gwinnett Counties) - Evening

D
Congestion Type: Mainline Signal Queue
Location: SR 306
Frequency: Most observations before 6:00 p.m.
Direction: Northbound
Queue Population: 40 to 60 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Ronald Reagan Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane.

F
Congestion Type: Mainline Queue
Location: Between Samples Rd & Suwanee Dam Rd
Frequency: Most Observations
Direction: Southbound
Number of Lanes: 1
Note: During the peak period, a mostly continuous zone of southbound congesiton was found approaching Suwanee Dam Rd; factors contributing to the congesiton were: 1) the signals at River Club Dr, James Burgess Rd and Suwanee Dam Rd; 2) the bridge over the Chattahoochee River and; 3) left-turning vehicles at Riverside Rd.

G
Congestion Type: Mainline Signal Queue
Location: Sycamore Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Queue/Platoons
Location: Between Peachtree Industrial Blvd & Hillcrest Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Factors contributing to the congestion were: 1) the signal at Hillcrest Dr and; 2) the lane drop (2 lanes to 1) in the vicinity of Peachtree Industrial Blvd.

I
Congestion Type: Mainline Signal Queue
Location: Rock Springs Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Cross Road Signal Queue
Location: Russell Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

K
Congestion Type: Left-Turn Queue
Location: Simonton Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

L
Congestion Type: Mainline Queue
Location: Sosebee Farm Rd
Frequency: Most observations
Direction: Southbound
Number of Lanes: 1
Note: During the peak period, a one to two mile zone of southbound congestion was found between Park Place Dr and SR 84; factors contributing to the congestion were: 1) ongoing construction (roadway widening) along this corridor and; 2) the signals at Park Place Dr, Webb Gin House Rd, Hillside Dr, and Sosebee Farm Rd. Intermittently, congestion was found south of Sosebee Farm Rd approaching the signals at Rosebud Rd and SR 84.

M
Congestion Type: Platoons
Location: Vicinity of Cooper Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction in the vicinity of Cooper Rd (roadway widening).

N
Congestion Type: Mainline Signal Queue
Location: Cooper Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 45 to 95 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction in the vicinity of Cooper Rd (roadway widening).

O
Congestion Type: Cross Road Signal Queue
Location: Ozora Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left turn lane.

P
Congestion Type: Cross Road Signal Queue
Location: Cooper Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Q
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations before 5:00 p.m.
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

R
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

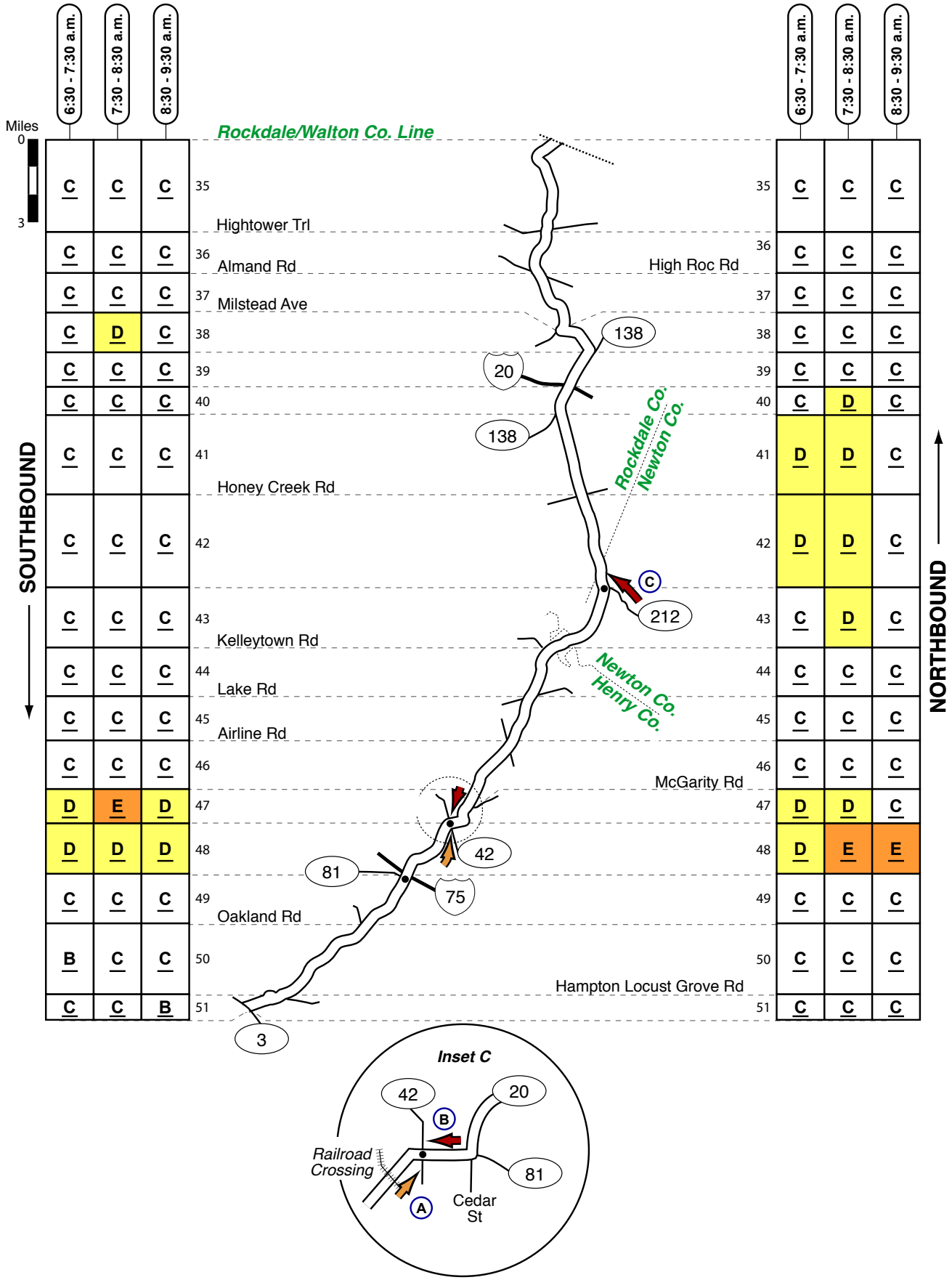
S
Congestion Type: Cross Road Signal Queue
Location: SR 316
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2
(per 2007 data/analysis)

T
Congestion Type: Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Construction Zone
PI# 121710
Description: Roadway Widening

Spring 2008

SR 20 (Rockdale/Newton & Henry Counties) - Morning



Miles	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.		6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
35	C	C	C	35	C	C	C
36	C	C	C	36	C	C	C
37	C	C	C	37	C	C	C
38	C	D	C	38	C	C	C
39	C	C	C	39	C	C	C
40	C	C	C	40	C	D	C
41	C	C	C	41	D	D	C
42	C	C	C	42	D	D	C
43	C	C	C	43	C	D	C
44	C	C	C	44	C	C	C
45	C	C	C	45	C	C	C
46	C	C	C	46	C	C	C
47	D	E	D	47	D	D	C
48	D	D	D	48	D	E	E
49	C	C	C	49	C	C	C
50	B	C	C	50	C	C	C
51	C	C	B	51	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Rockdale/Newton & Henry Counties) - Morning

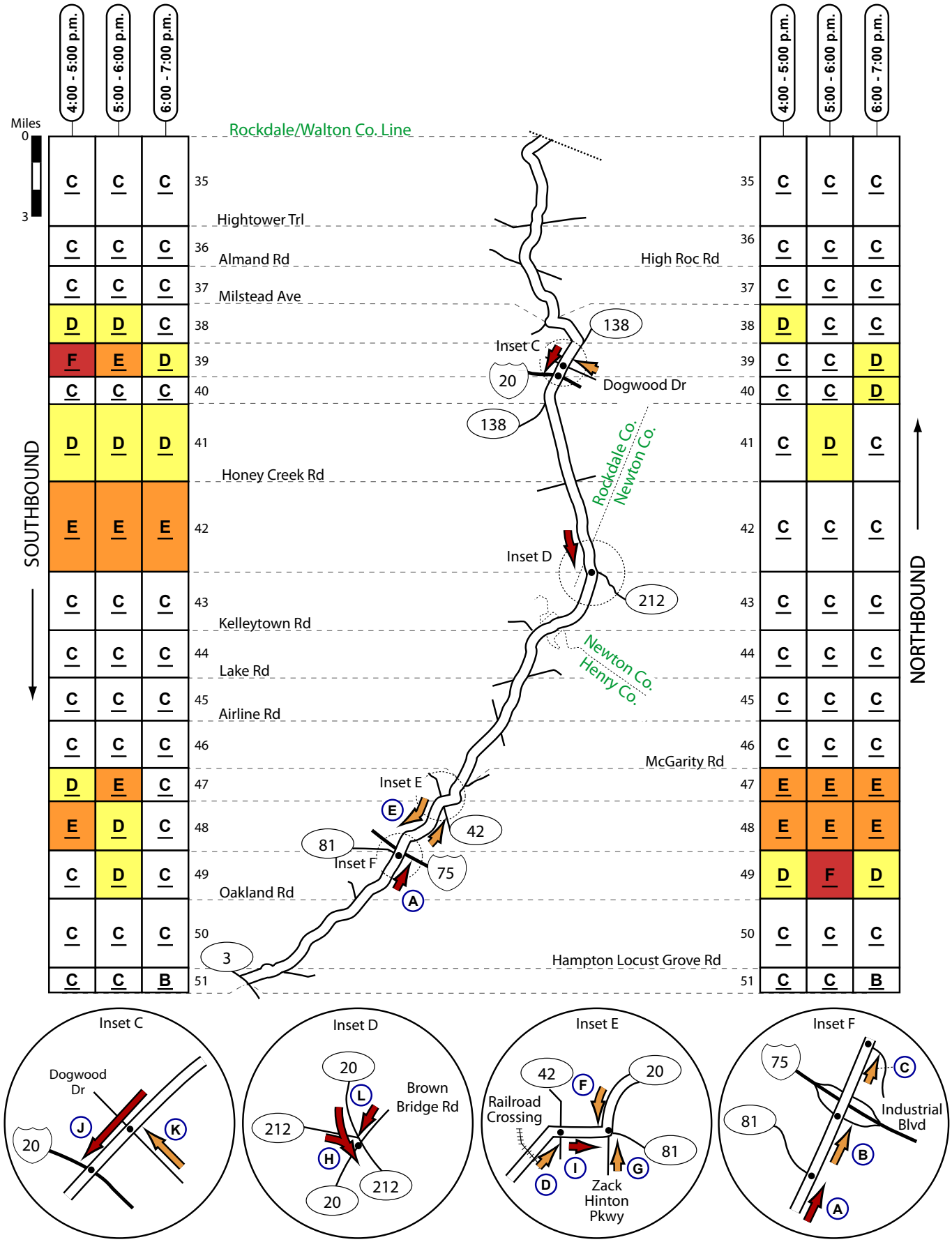
A
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the one thru-lane at the signal

C
Congestion Type: Cross Road Signal Queue
Location: SR 212
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 20 (Rockdale/Newton & Henry Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 20 (Rockdale/Newton & Henry Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 81
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: I-75
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

E
Congestion Type: Platoons
Location: Between SR 42 & I-75
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: SR 81 (John Frank Ward Blvd)
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: Zack Hinton Parkway
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Signal Queue
Location: SR 212
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Congestion typically extended back onto SR 212 (Scott Highway).

I
Congestion Type: Mainline Signal Queue
Location: Zack Hinton Parkway
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2

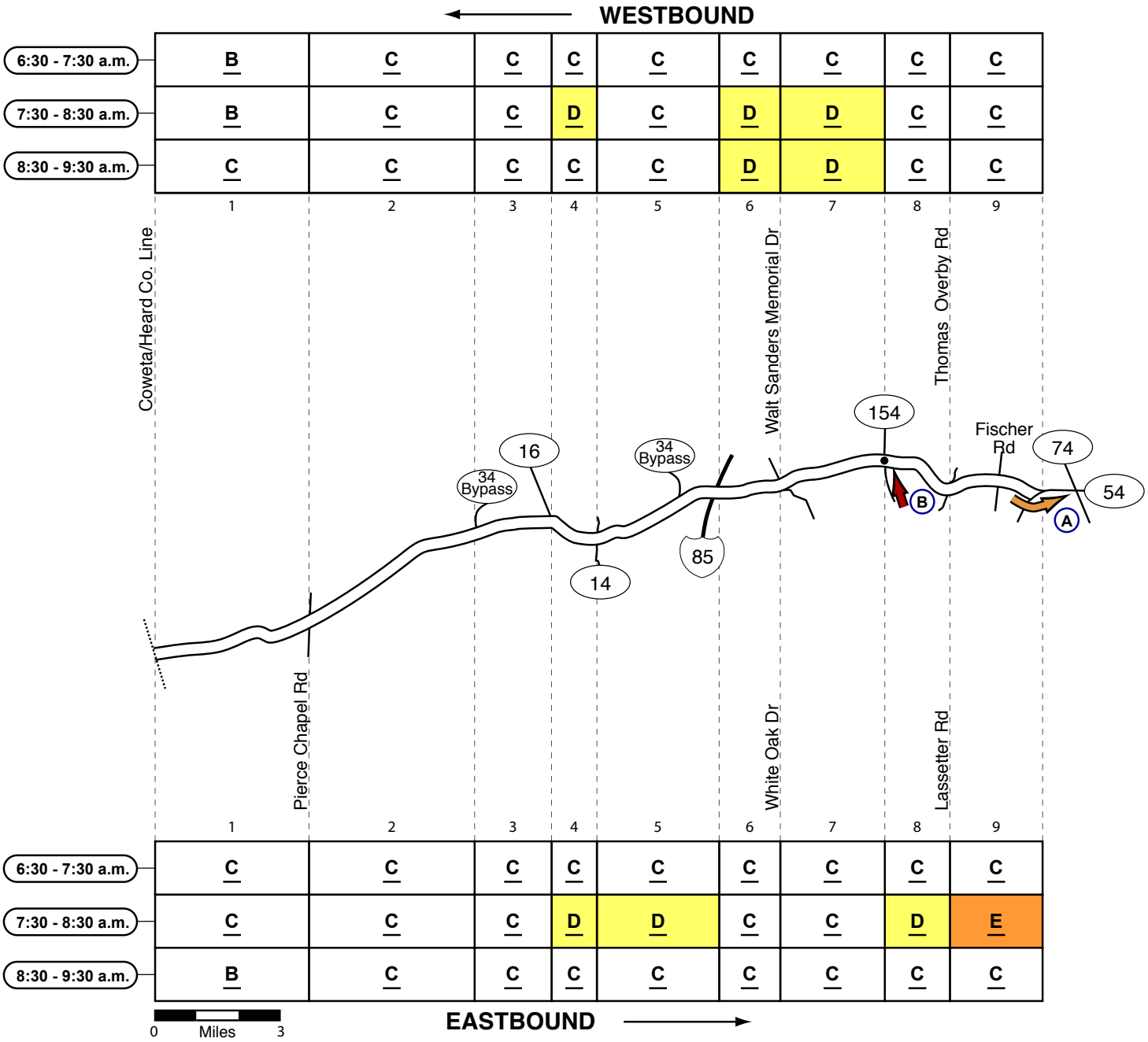
J
Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: On some days but not others
Direction: Westbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2
Note: Intermitently, congestion extended back through the upstream signal at Dogwood Dr.

K
Congestion Type: Cross Road Signal Queue
Location: Dogwood Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: The head of the queue was found in the two left-turn lanes

L
Congestion Type: Cross Road Signal Queue
Location: Brown Bridge Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

(Blank)

Spring 2008
SR 34 (Coweta County) - Morning



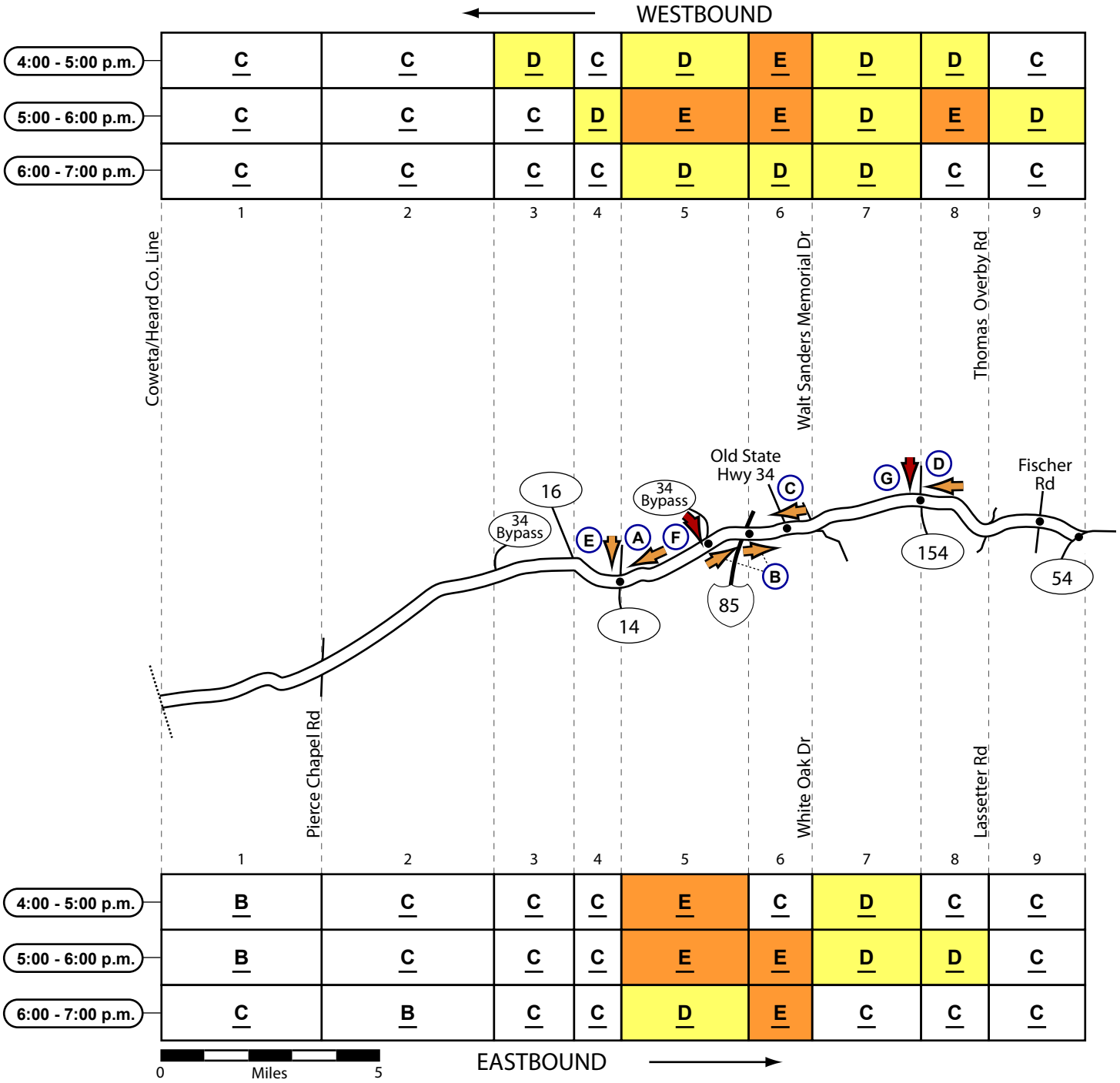
A
Congestion Type: Platoons
Location: Between Fischer Rd & SR 54
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 40 to 60 vpl
Number of Lanes: 2

B
Congestion Type: Cross Road Signal Queue
Location: SR 154
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 34 (Coweta County) - Evening



	1	2	3	4	5	6	7	8	9
4:00 - 5:00 p.m.	C	C	D	C	D	E	D	D	C
5:00 - 6:00 p.m.	C	C	C	D	E	E	D	E	D
6:00 - 7:00 p.m.	C	C	C	C	D	D	D	C	C

	1	2	3	4	5	6	7	8	9
4:00 - 5:00 p.m.	B	C	C	C	E	C	D	C	C
5:00 - 6:00 p.m.	B	C	C	C	E	E	D	D	C
6:00 - 7:00 p.m.	C	B	C	C	D	E	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 34 (Coweta County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue/Platoons
Location: I-85
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 3

C
Congestion Type: Mainline Signal Queue/Platoons
Location: Old State Highway 34
Frequency: Most observations before 6:00 p.m.
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 154
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

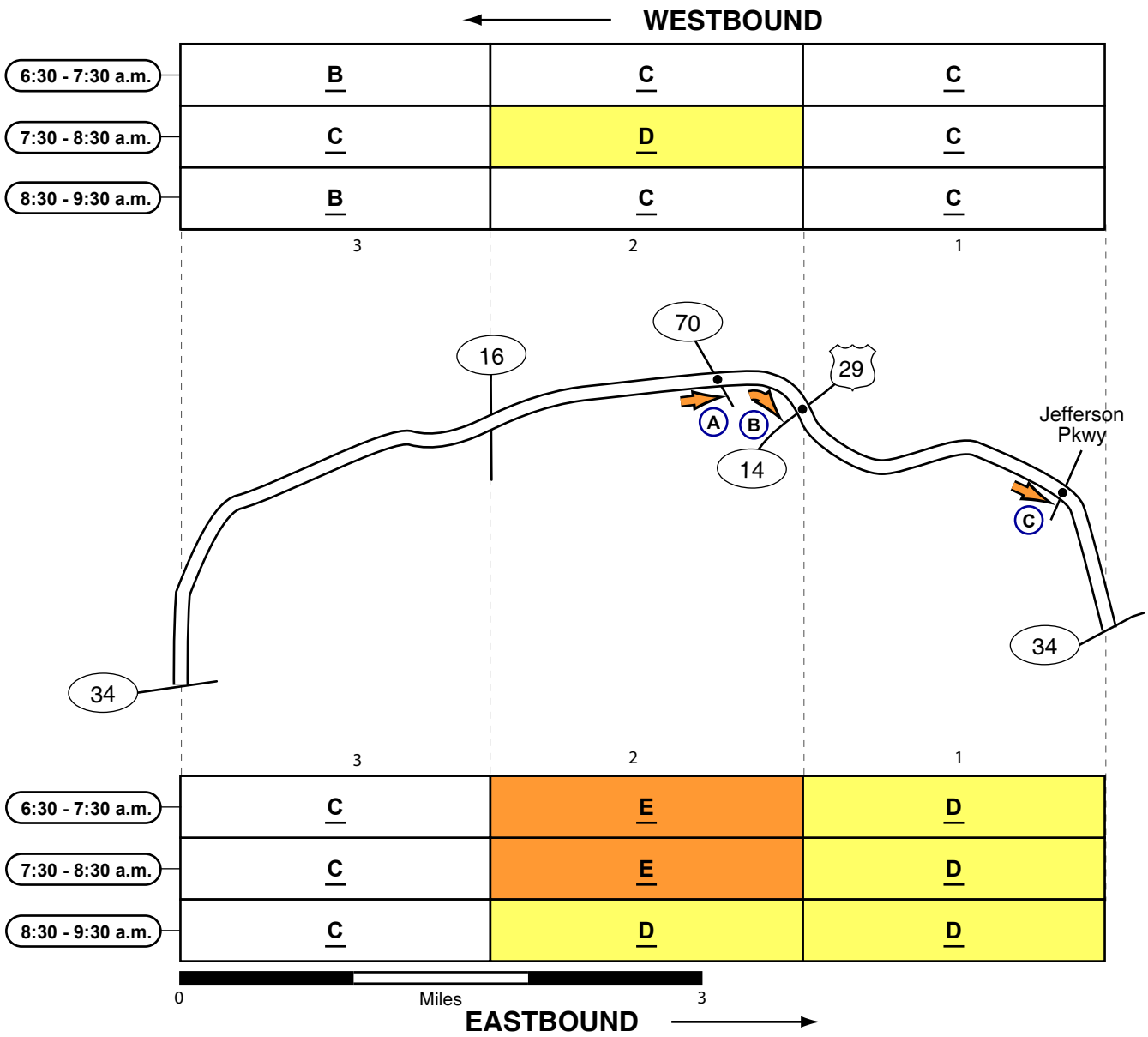
E
Congestion Type: Cross Road Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: SR 34 Bypass
Frequency: Most observations
Direction: Eastbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: SR 154
Frequency: Peak hour
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

Spring 2008

SR 34 Bypass (Coweta County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: SR 70
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

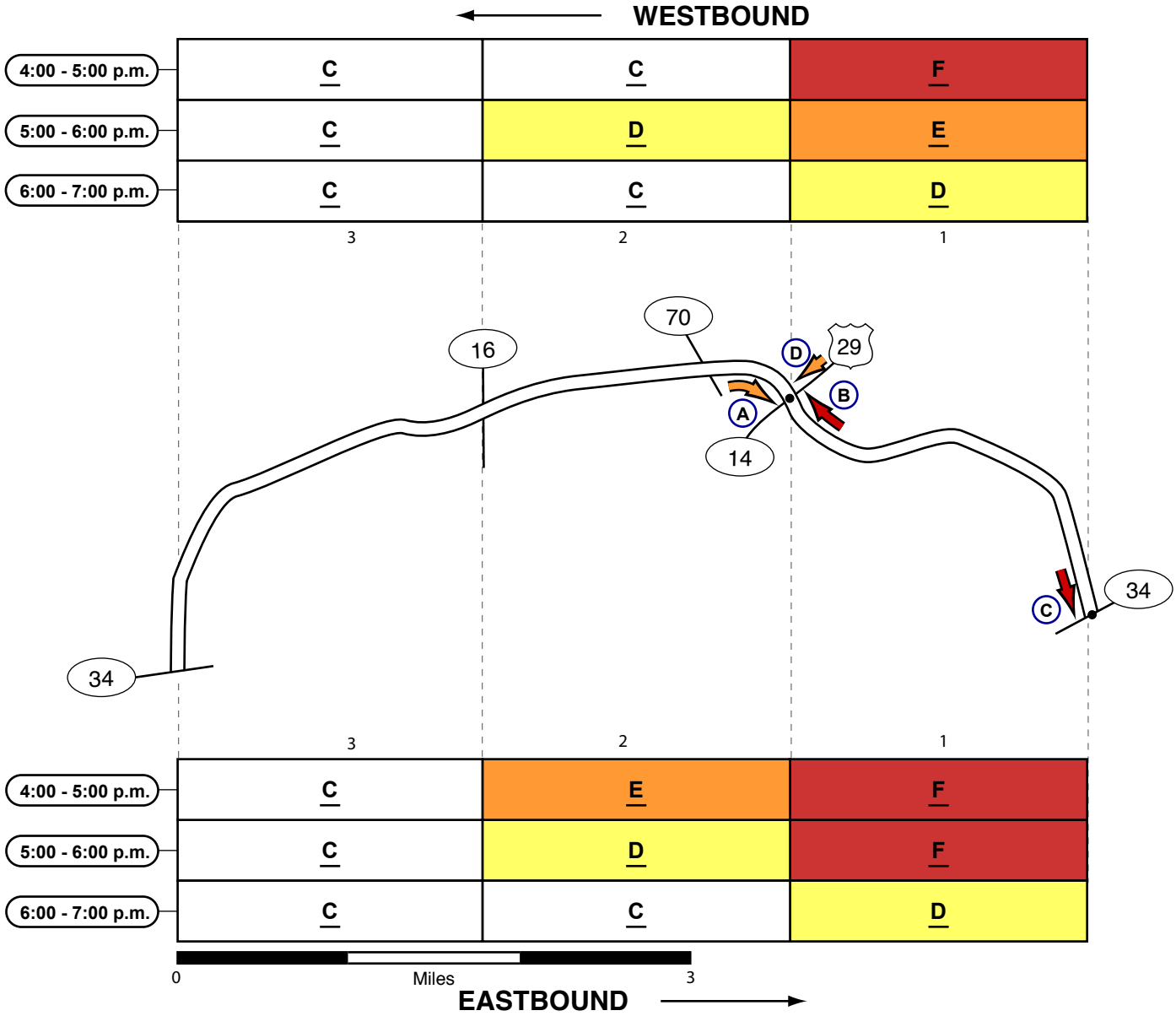
B
Congestion Type: Mainline Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Jefferson Parkway
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 34 Bypass (Coweta County) - Evening



A
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 14/US 29
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 14/US 29
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1
Note: During one observation, the queue contained approximately 120 vehicles.

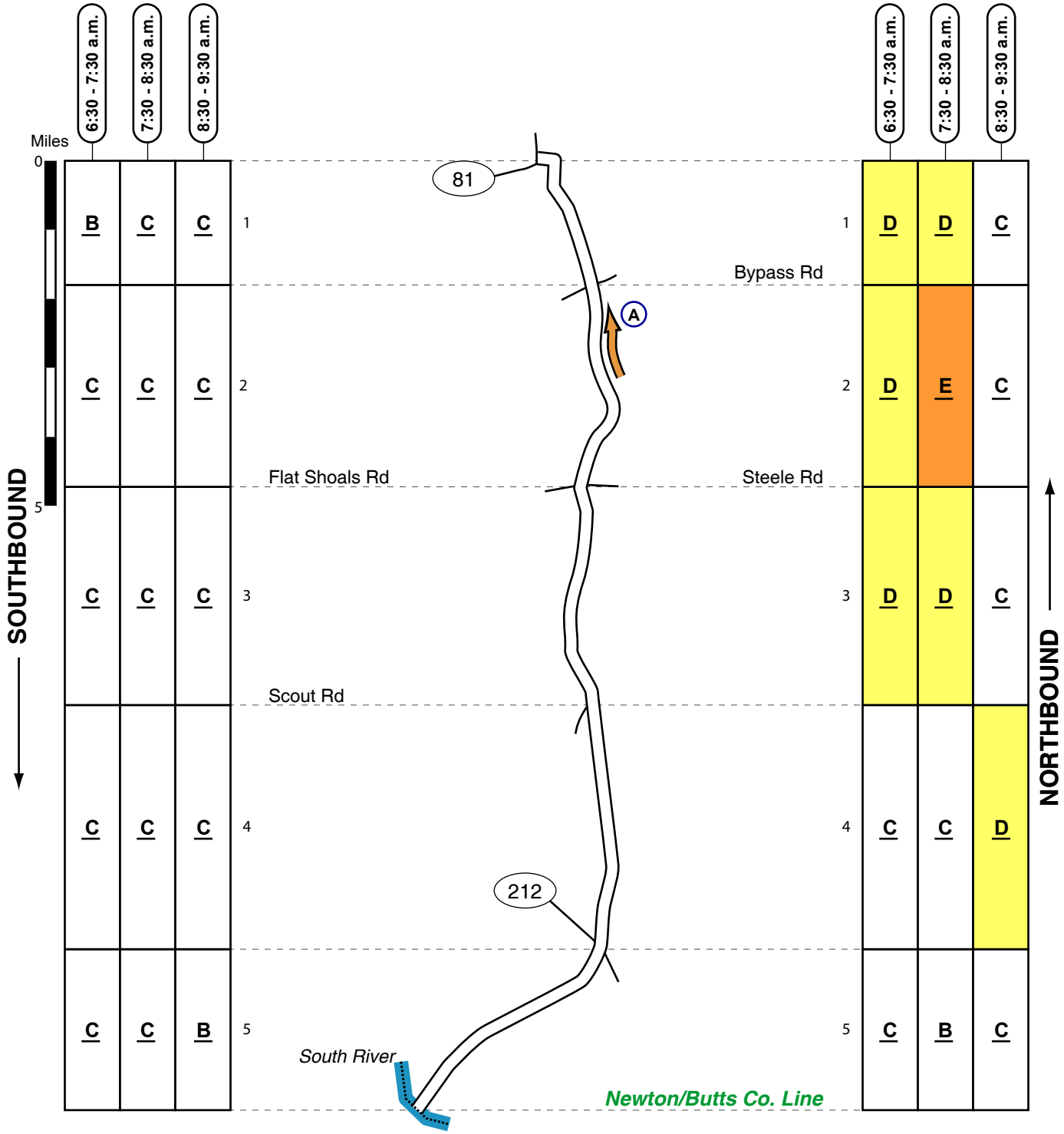
C
Congestion Type: Mainline Signal Queue
Location: SR 34
Frequency: Most observations
Direction: Eastbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

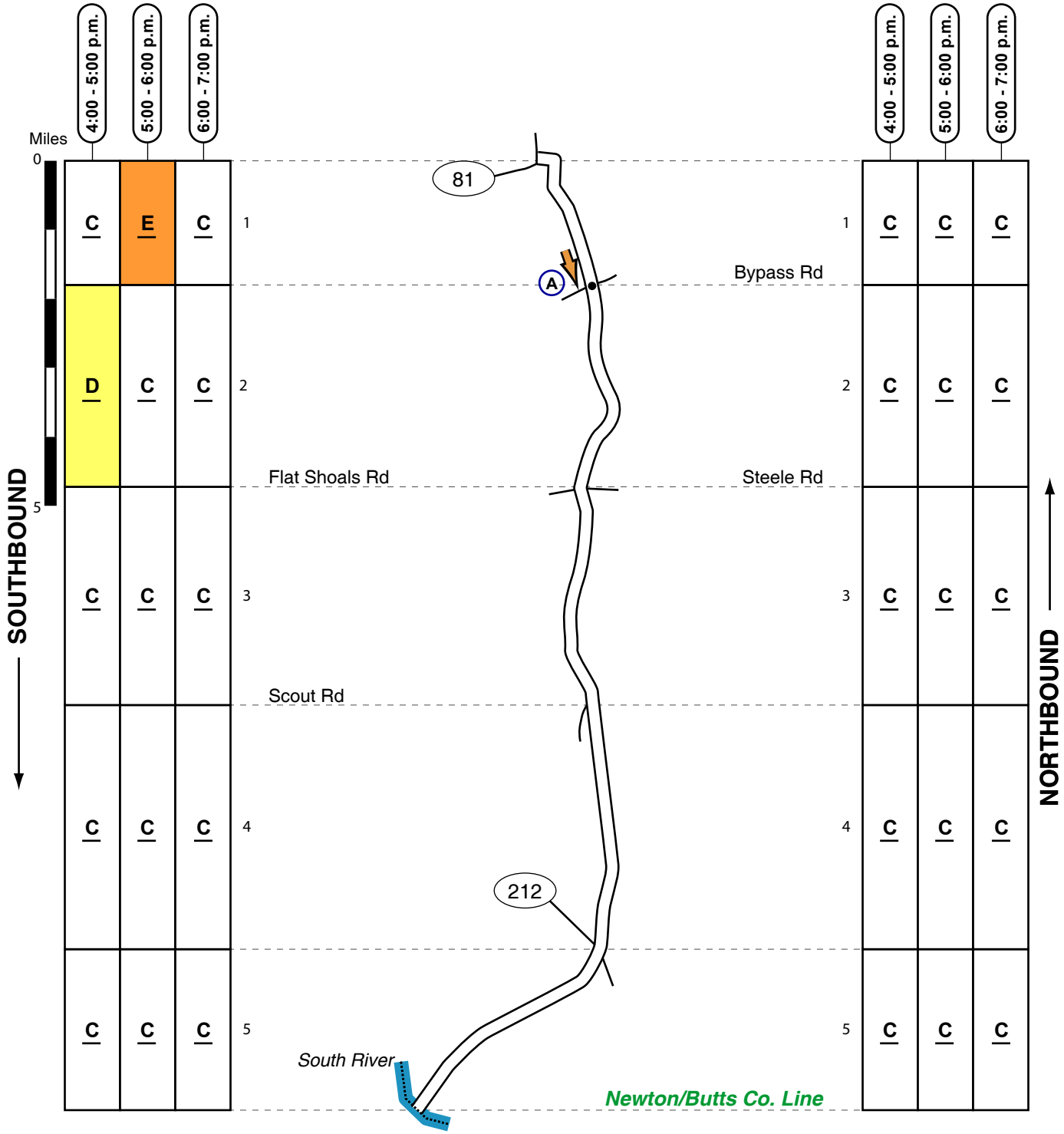
SR 36 (Newton County) - Morning



A
Congestion Type: Platoons
Location: Between Steele Rd & Bypass Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 36 (Newton County) - Evening

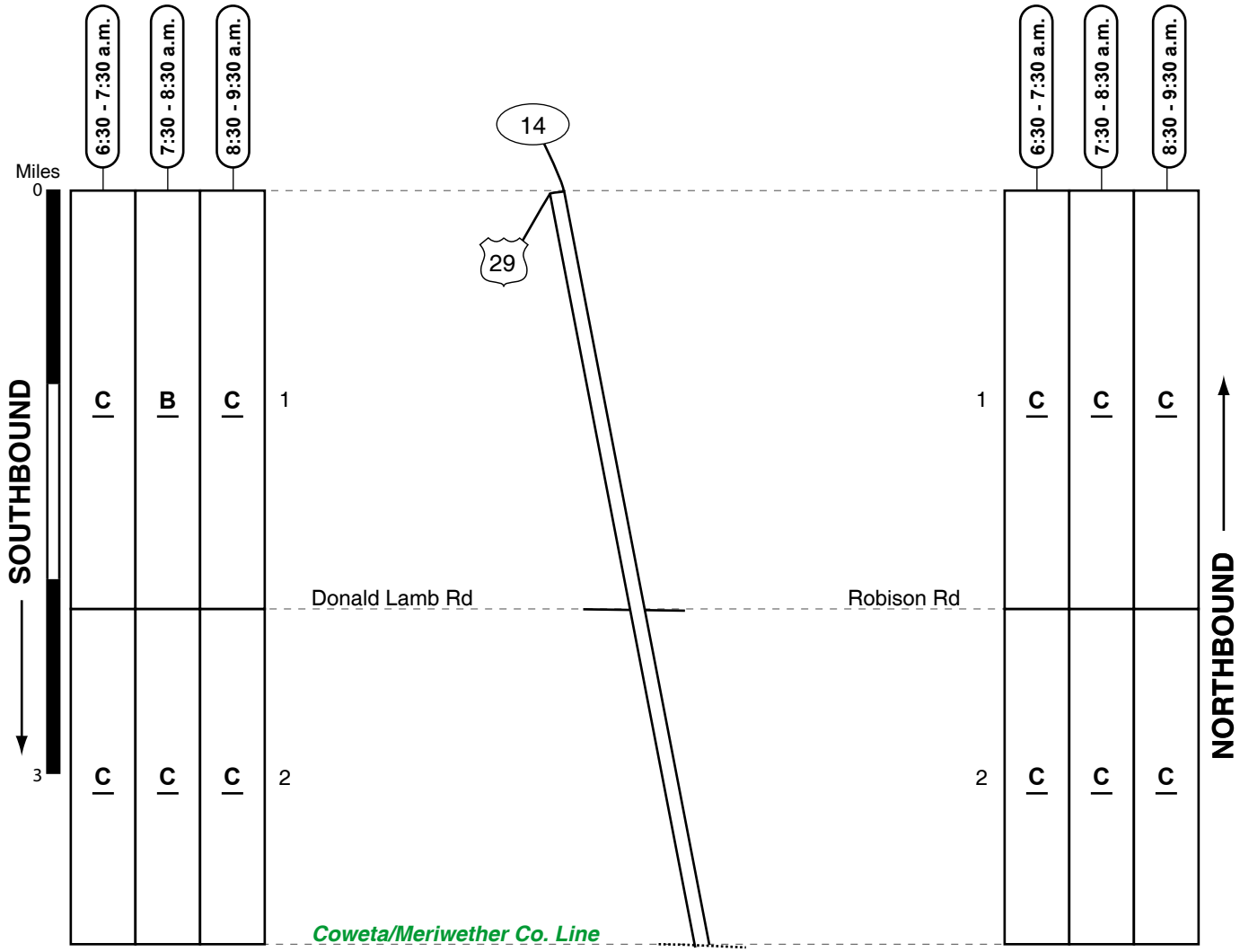


A
Congestion Type: Mainline Signal Queue/Platoons
Location: Bypass Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

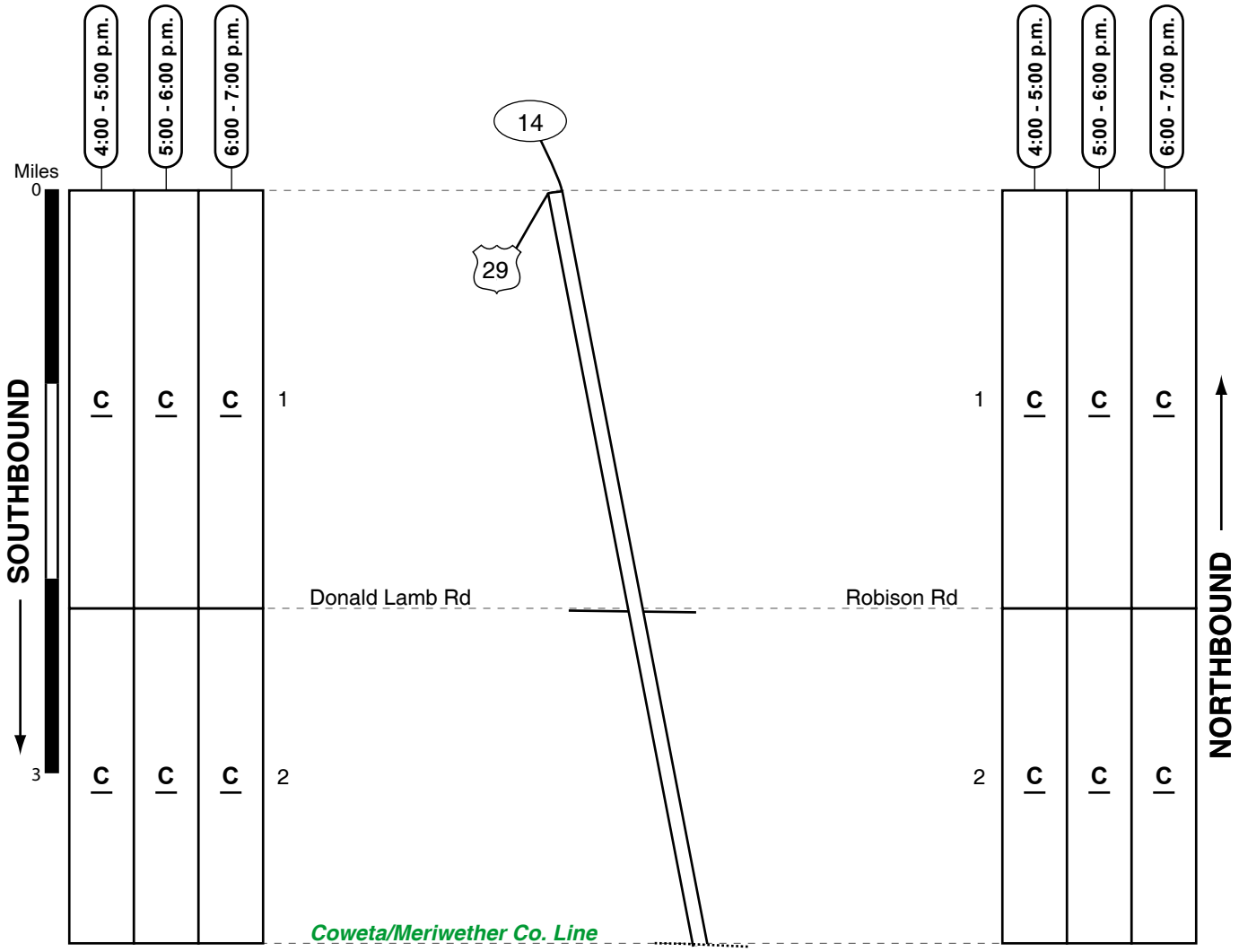
SR 41 (Coweta County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

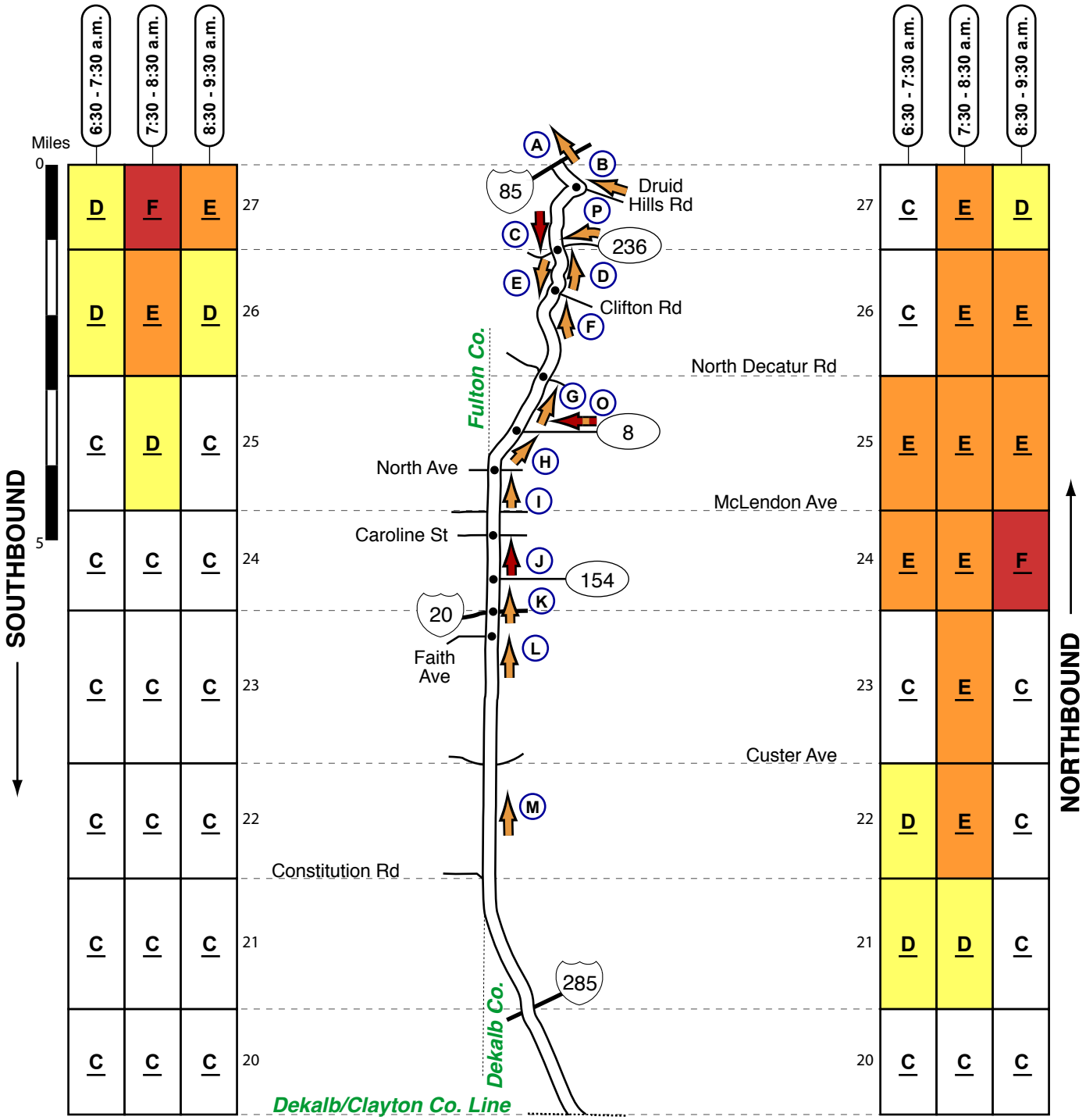
SR 41 (Coweta County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 42 (Fulton & Dekalb Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 42 (Fulton & Dekalb Counties) - Morning

A
Congestion Type: Platoons
Location: vicinity of I-85
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2
Note: Congestion was exacerbated by the signals at SR 13, I-85 and Executive Park Dr.

B
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 90 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue/ Platoons
Location: Approaching Clifton Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Clifton Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: North Decatur Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: North Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: Caroline St
Frequency: Most observations between 8:00 & 9:00 a.m.
Direction: Northbound
Queue Population: 50 to 60 vpl
Number of Lanes: 2
Note: Congestion sometimes backed through the upstream signals at Hardee St, Hosea L Williams Dr and Wylie St.

K
Congestion Type: Mainline Signal Queue
Location: SR 154
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion typically extended back onto the ramp from I-20 (westbound).

L
Congestion Type: Mainline Signal Queue
Location: Faith Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

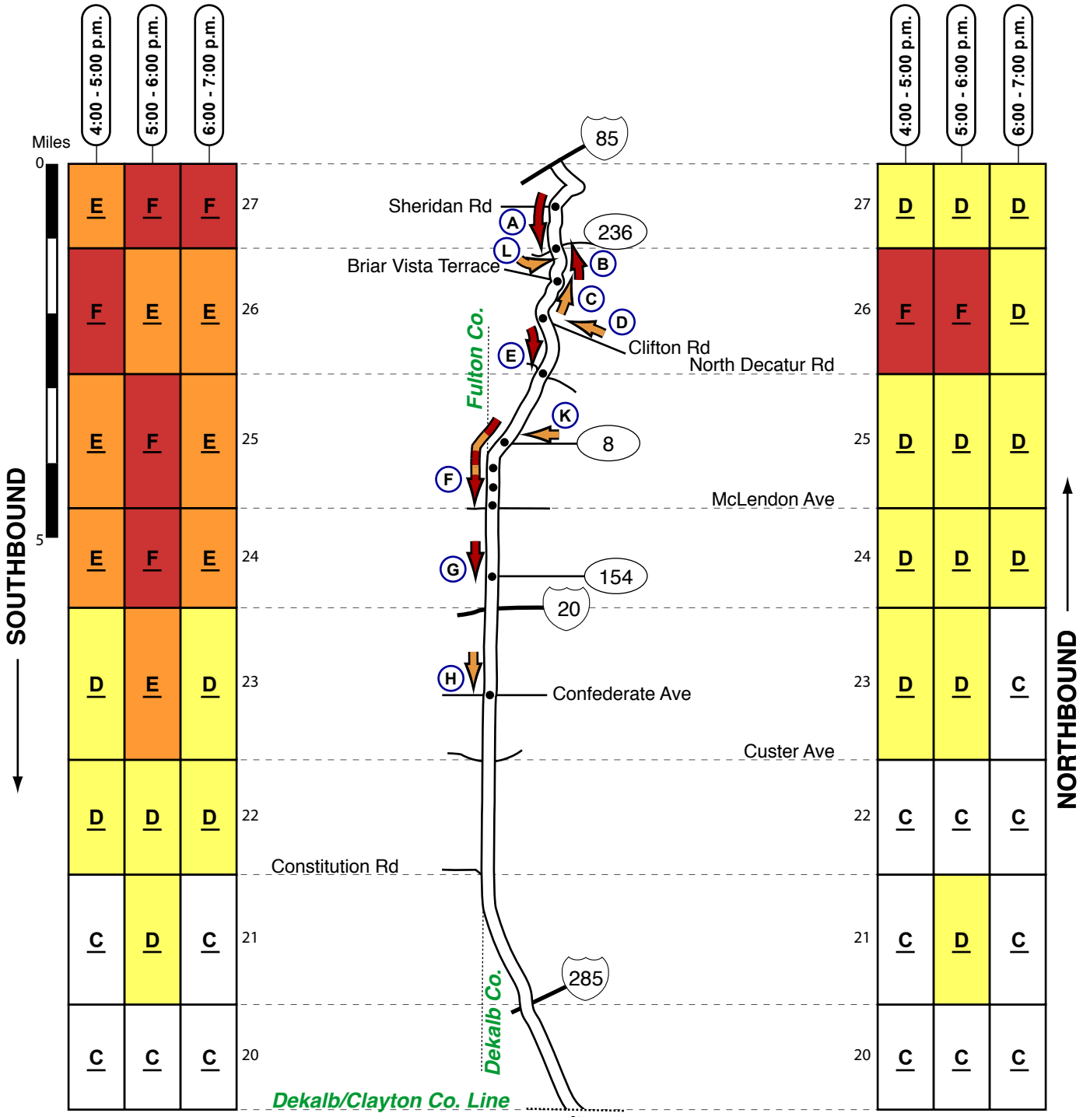
M
Congestion Type: Platoons
Location: Between Constitution Rd & Custer Ave
Frequency: Intermittent
Direction: Northbound
Platoon Population: 30 to 40 vpl
Number of Lanes: 2

O
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Most observations
Direction: Westbound
Number of Lanes: 2
Note: During the peak period, a one to two mile zone of westbound congestion was found on SR 8 between SR 10 and SR 42. Signals generating congestion included: SR 42, Springdale Rd, Oakdale Rd, Lullwater Rd, and Clifton Rd. On some days but not others, a mostly continuous zone of congestion was found between Clifton Rd and SR 42.

P
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Spring 2008

SR 42 (Fulton & Dekalb Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 42 (Fulton & Dekalb Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically backed through the upstream signal at Sheridan Rd

B
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Briar Vista Terrace
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: Clifton Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion was typically limited to the right lane.

E
Congestion Type: Mainline Signal Queue
Location: North Decatur Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 30 to 70 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Between North Decatur Rd & McLendon Ave
Frequency: Most observations
Direction: Southbound
Number of Lanes: 2
Note: During the peak period, a 1 to 1.5 mile zone of southbound congestion was found along this segment; congestion was exacerbated by the closely spaced signals at SR 8, North Ave, Vaud Ave, Mansfield Ave, Euclid Ave and McLendon Ave

G
Congestion Type: Mainline Signal Queue
Location: SR 154
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

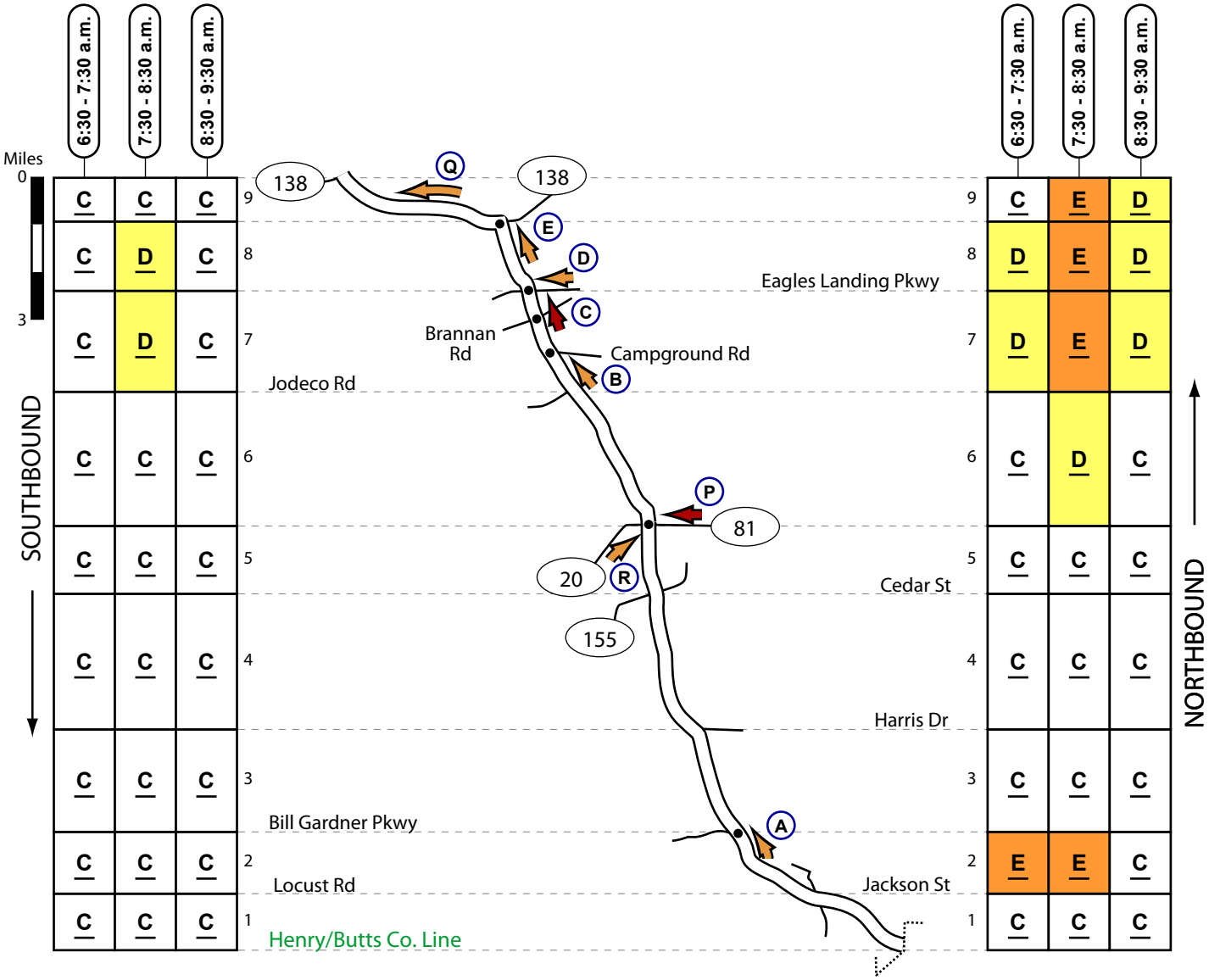
H
Congestion Type: Mainline Signal Queue
Location: Confederate Ave
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Left Turn Queue
Location: SR 8
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: When congested, the queue in the left-turn lane typically extended back into the left lane of SR 8.

L
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 42 (Henry County) - Morning



	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
9	C	C	C
8	C	D	C
7	C	D	C
6	C	C	C
5	C	C	C
4	C	C	C
3	C	C	C
2	C	C	C
1	C	C	C

	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
9	C	E	D
8	D	E	D
7	D	E	D
6	C	D	C
5	C	C	C
4	C	C	C
3	C	C	C
2	E	E	C
1	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 42 (Henry County) - Morning

A
Congestion Type: Mainline Signal Queue/Platoons
Location: Bill Gardner Parkway
Frequency: Most observations between 7:00 & 8:00 a.m.
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: The head of the queue was typically found in the left-turn lane; congestion sometimes extended back into the mainline of SR 42.

B
Congestion Type: Mainline Signal Queue/Platoons
Location: Campground Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Left-Turn Queue
Location: Eagles Landing Parkway
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: Congestion was typically limited to the left-turn lane; during one observation only, congestion extended back into the mainline of SR 42.

D
Congestion Type: Cross Road Signal Queue
Location: Eagles Landing Parkway
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 138
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

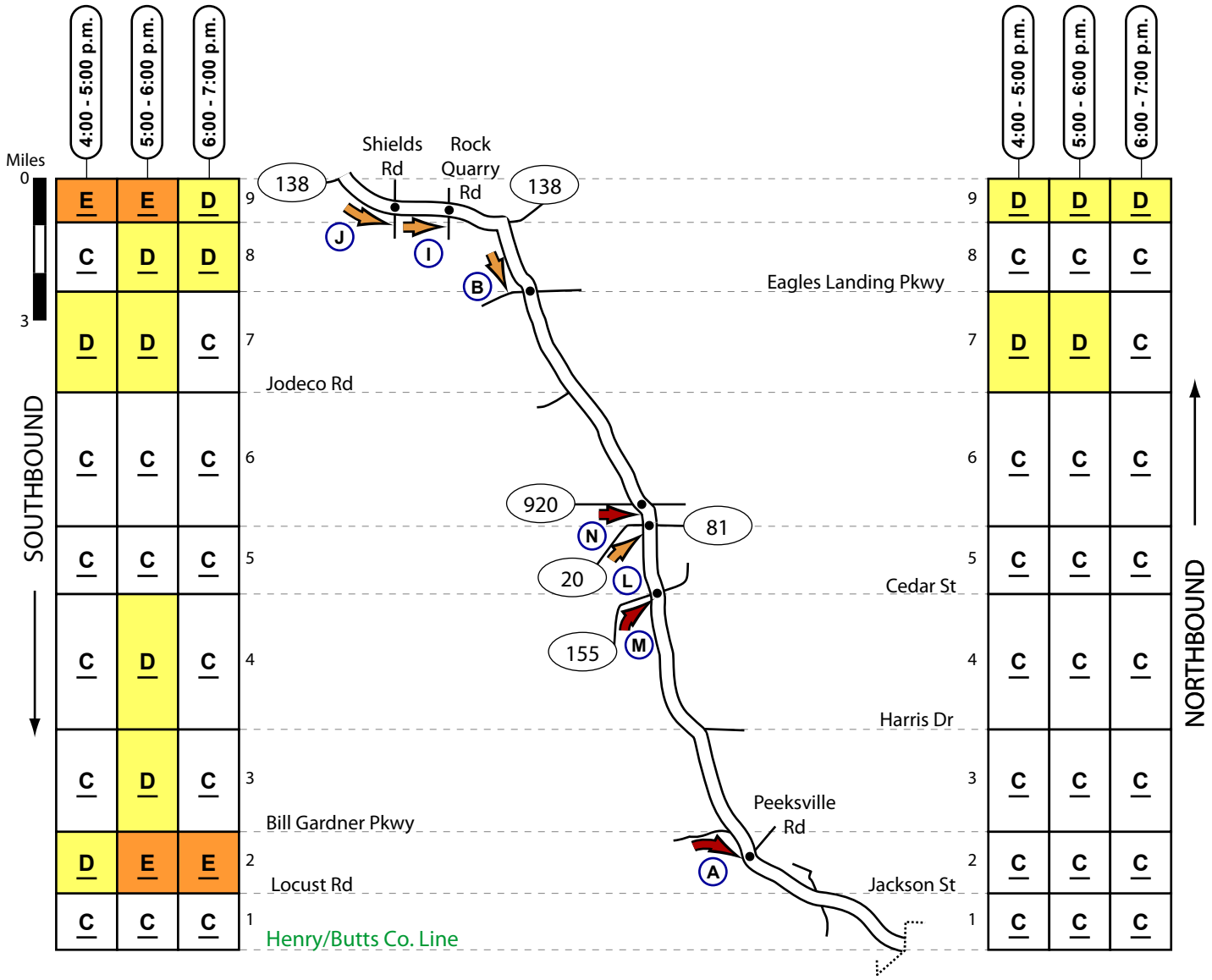
P
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the one thru-lane at the signal

Q
Congestion Type: Platoons
Location: Between SR 138 Intersections
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

R
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 42 (Henry County) - Evening



Mile	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.	Mile	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.
9	E	E	D	9	D	D	D
8	C	D	D	8	C	C	C
7	D	D	C	7	D	D	C
6	C	C	C	6	C	C	C
5	C	C	C	5	C	C	C
4	C	D	C	4	C	C	C
3	C	D	C	3	C	C	C
2	D	E	E	2	C	C	C
1	C	C	C	1	C	C	C

Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 42 (Henry County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Peeksville Rd
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion apppeared to be exacerbated by left-turning vehicles at Peeksville Rd; intermittently, congestion extended back onto Bill Gardner Parkway

B
Congestion Type: Mainline Signal Queue/ Platoons
Location: Eagles Landing Parkway
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

I
Congestion Type: Mainline Signal Queue
Location: Rock Quarry Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: Shields Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

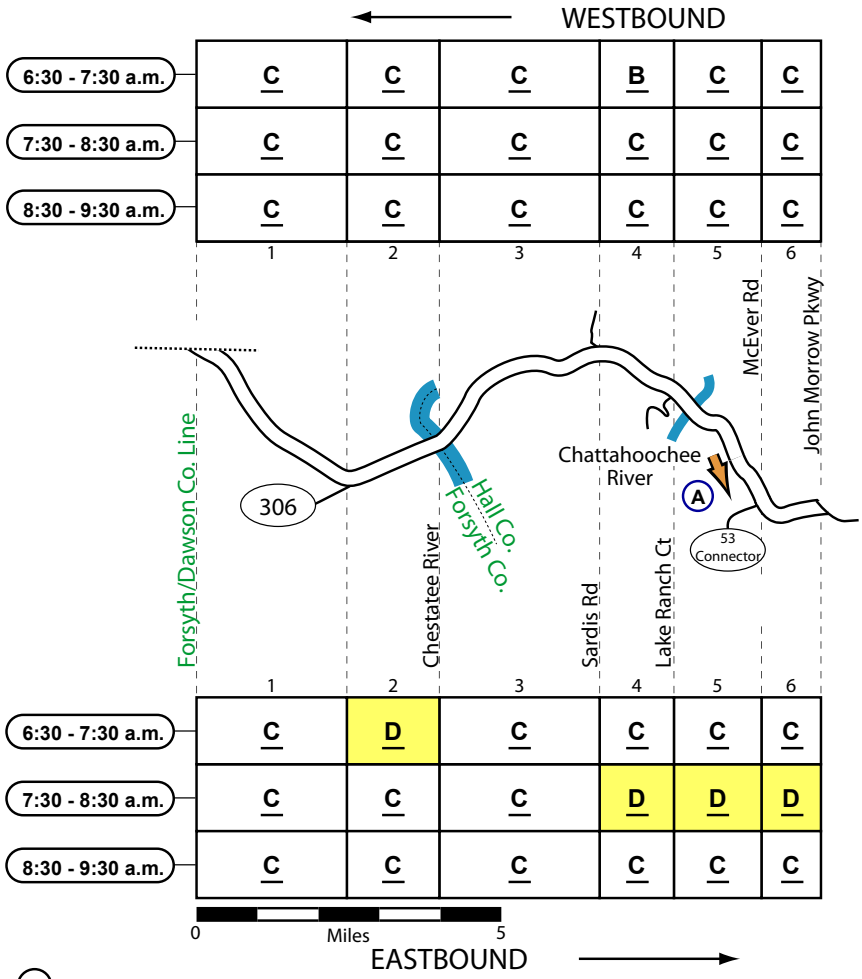
L
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

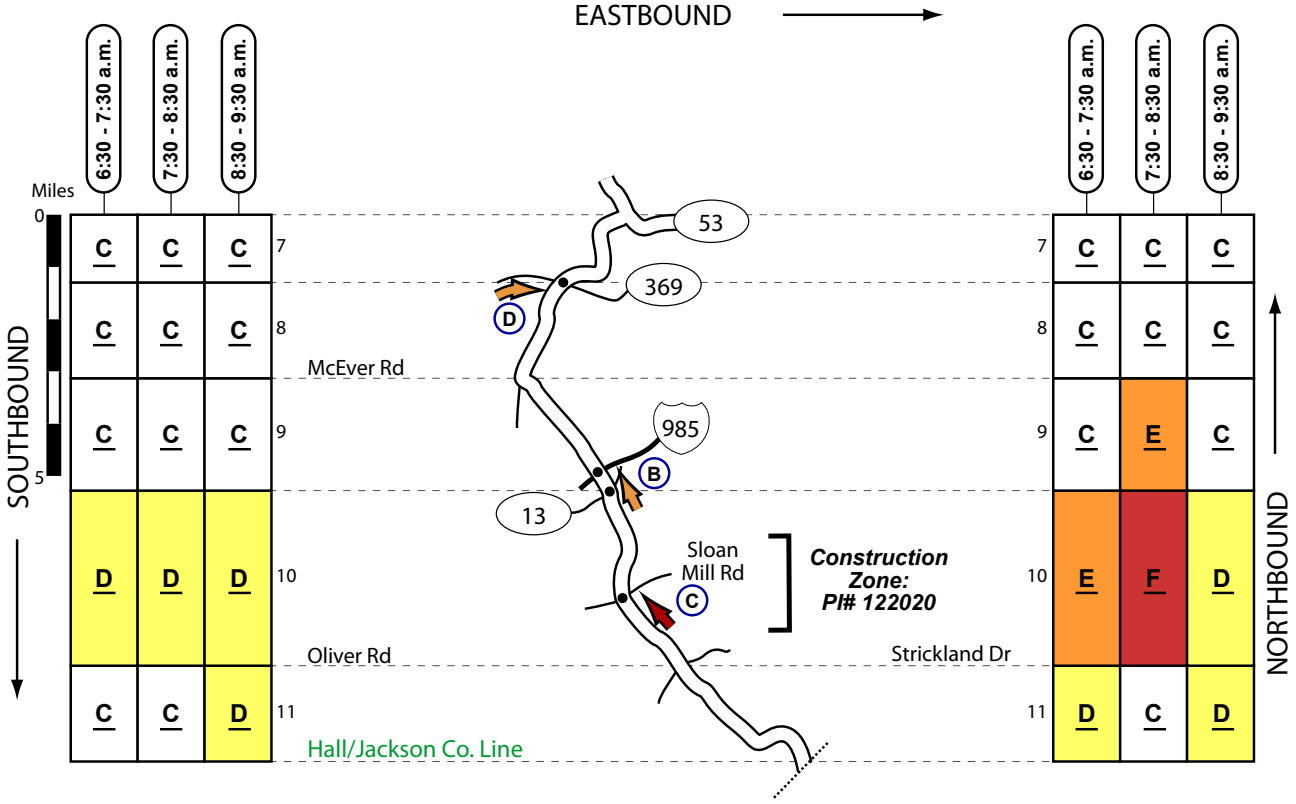
M
Congestion Type: Cross Road Signal Queue
Location: SR 155
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1

N
Congestion Type: Cross Road Signal Queue
Location: SR 920
Frequency: Peak hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 53 (Forsyth & Hall Counties) - Morning





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 53 (Forsyth & Hall Counties) - Morning

A
Congestion Type: Platoons
Location: Between Lake Ranch Ct
& McEver Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: I-985
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

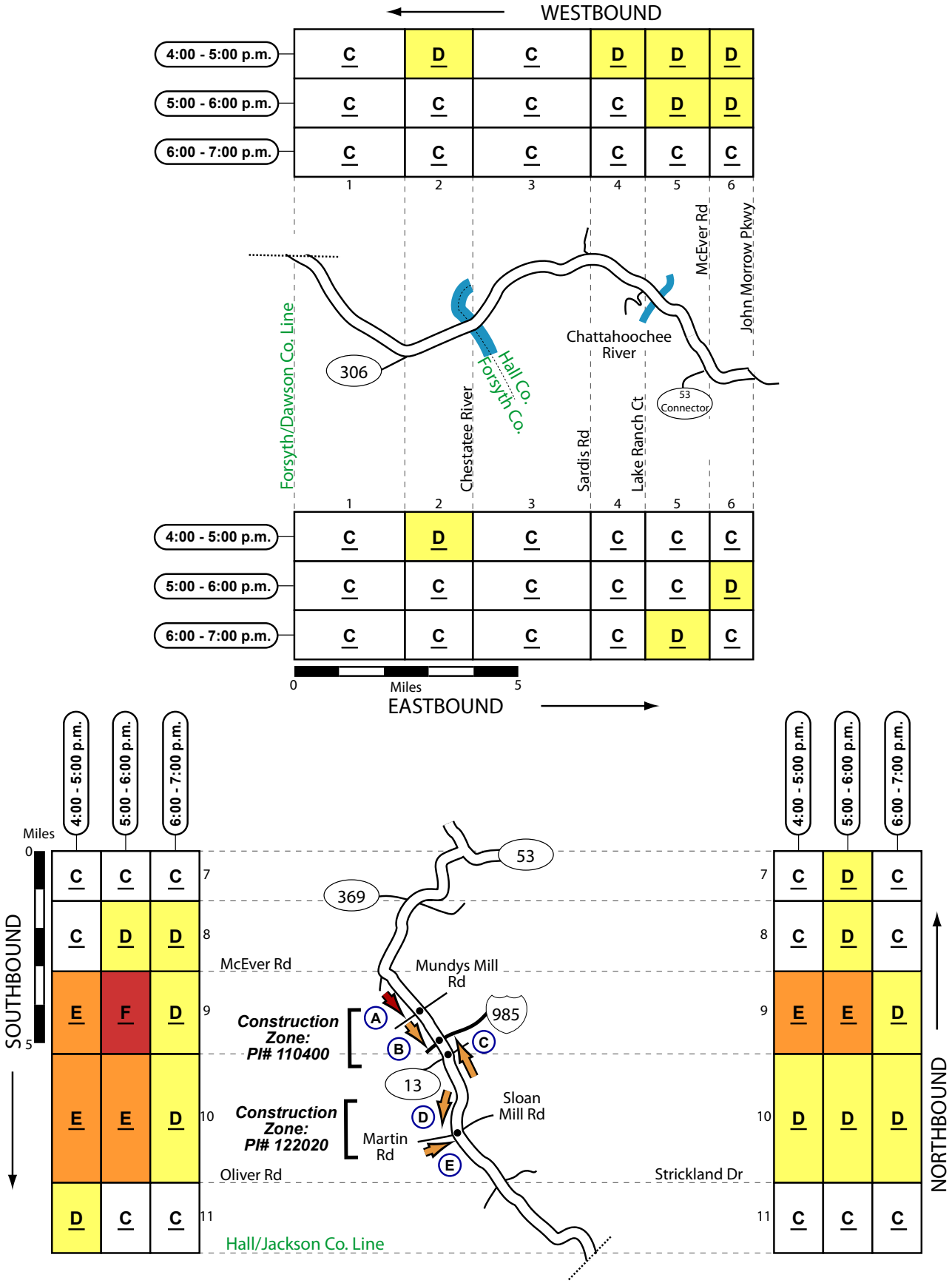
C
Congestion Type: Mainline Signal Queue
Location: Sloan Mill Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 110 vpl
Number of Lanes: 1
Note: Ongoing construction in the vicinity
of Sloan Mill Rd may have contributed to
the congestion.

D
Congestion Type: Cross Road Signal Queue
Location: SR 369
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Construction Zone
PI# 122020
Description: Roadway Widening

Spring 2008

SR 53 (Forsyth & Hall Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 53 (Forsyth & Hall Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Mundys Mill Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion appeared to exacerbated by ongoing construction between Thurmon Tanner Parkway and SR 13.

B
Congestion Type: Mainline Signal Queue
Location: I-985
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion appeared to exacerbated by ongoing construction between Thurmon Tanner Parkway and SR 13.

C
Congestion Type: Mainline Signal Queue
Location: I-985
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: Congestion appeared to exacerbated by ongoing construction between Thurmon Tanner Parkway and SR 13.

D
Congestion Type: Platoons
Location: Between SR 13 & Sloan Mill Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 50 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction in the vicinity of Sloan Mill Rd.

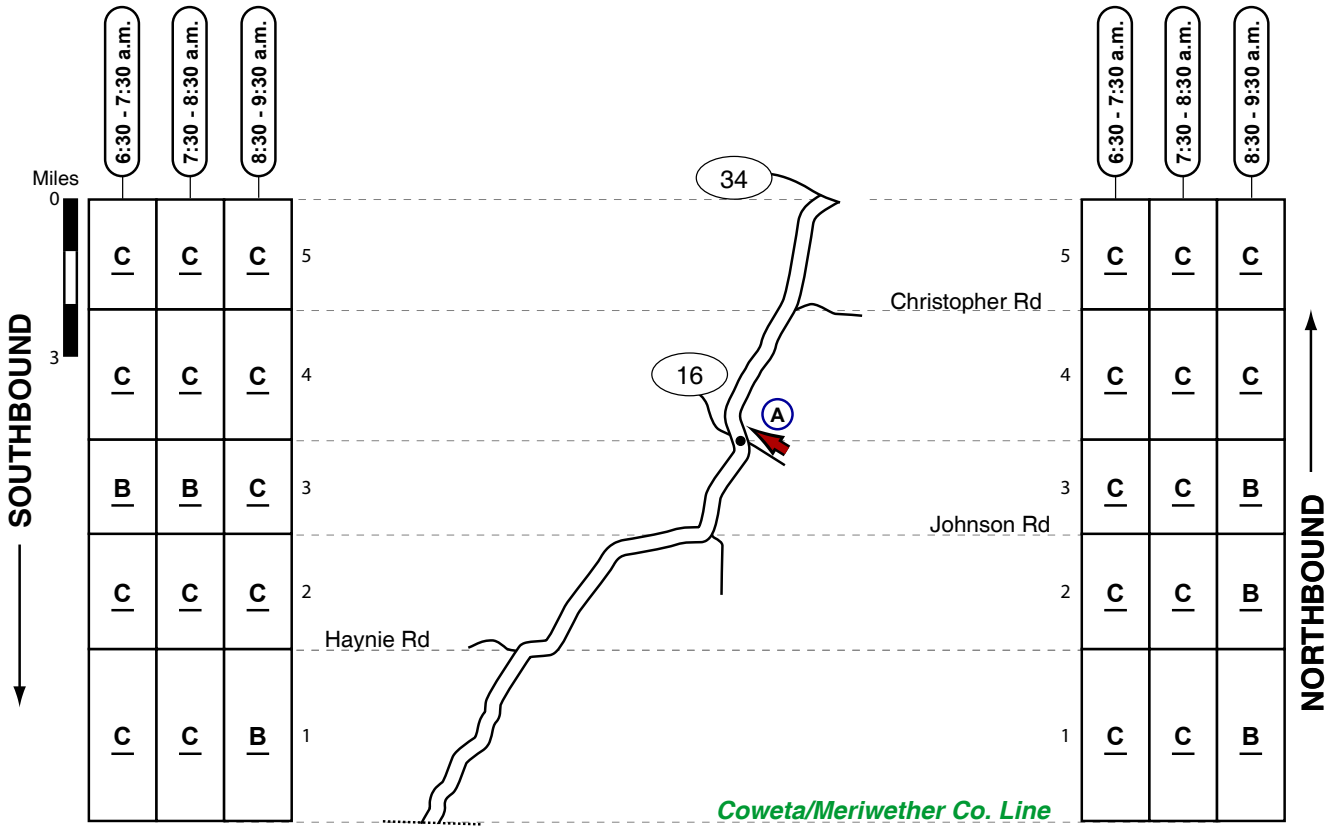
E
Congestion Type: Cross Road Signal Queue
Location: Martin Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

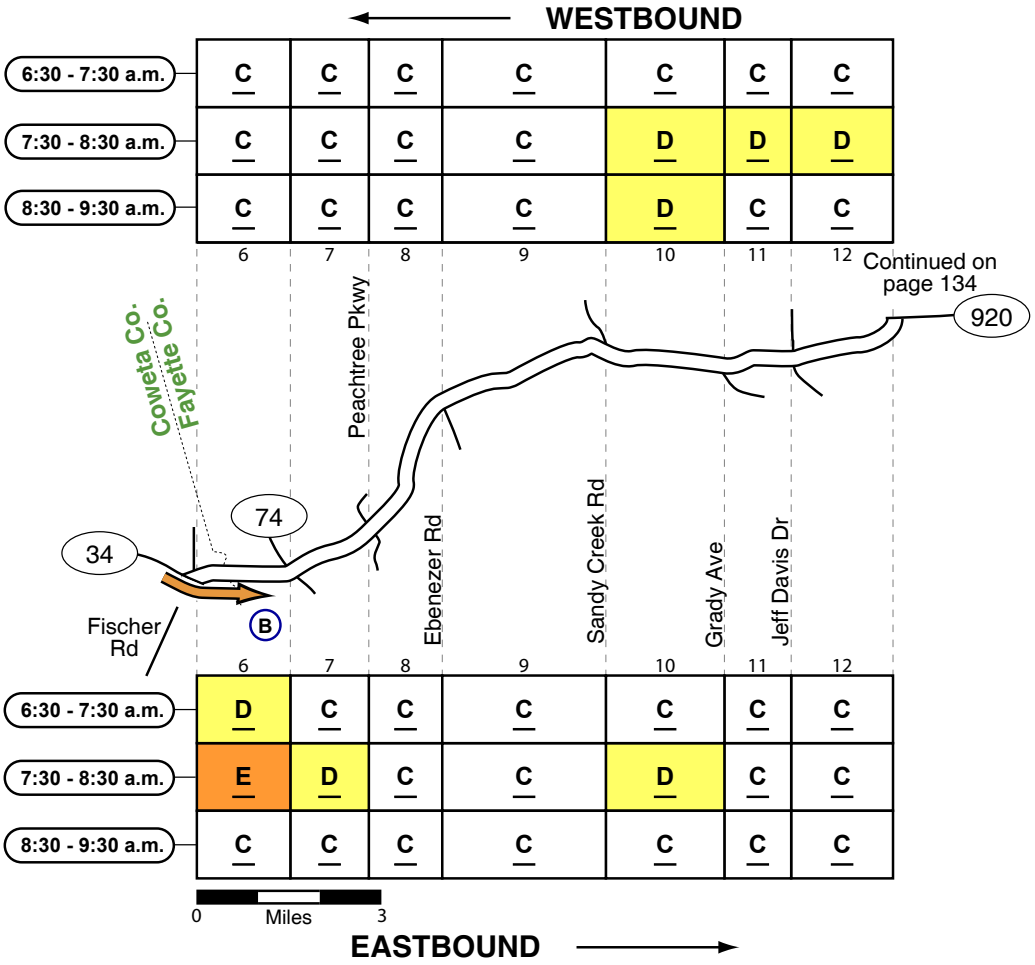
Construction Zone
PI# 122020
Description: Roadway Widening

Construction Zone
PI# 110400
Description: Interchange construction at I-985

Spring 2008

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Morning





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

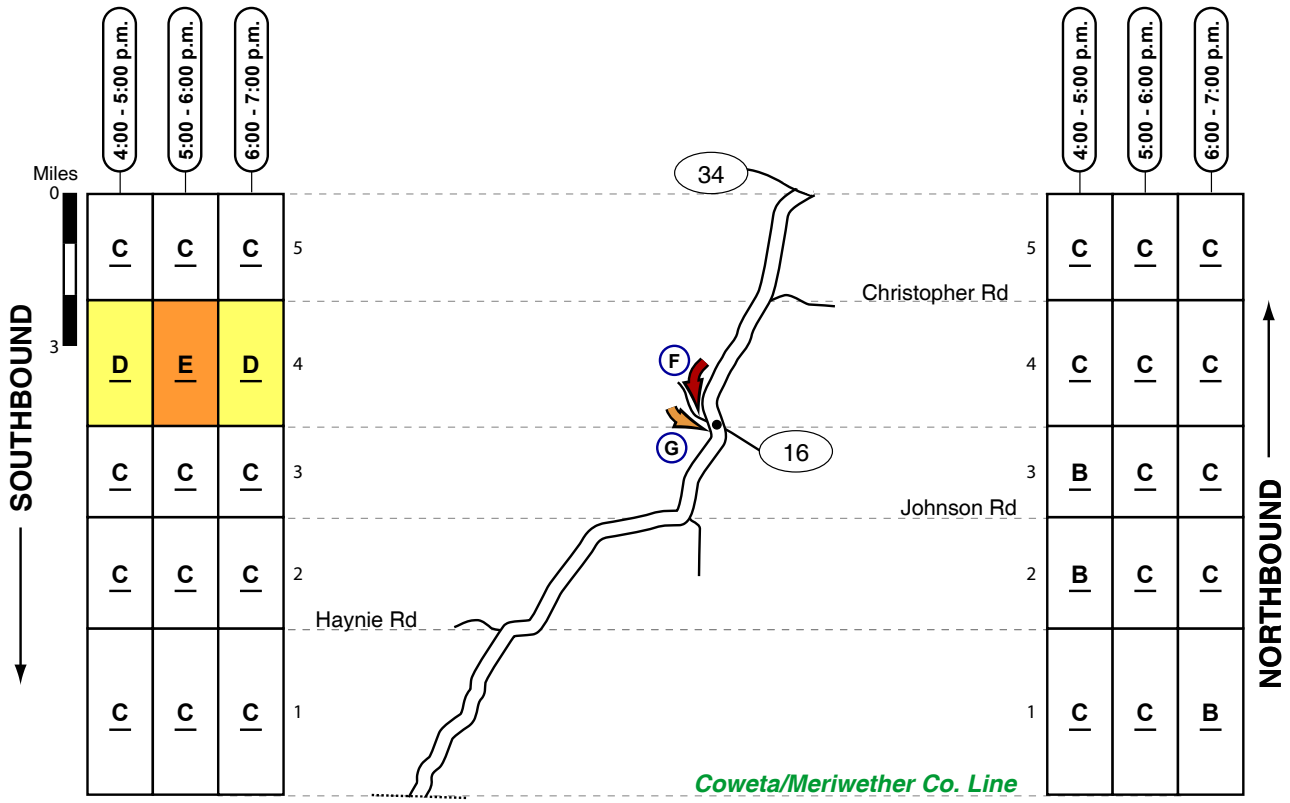
SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Morning

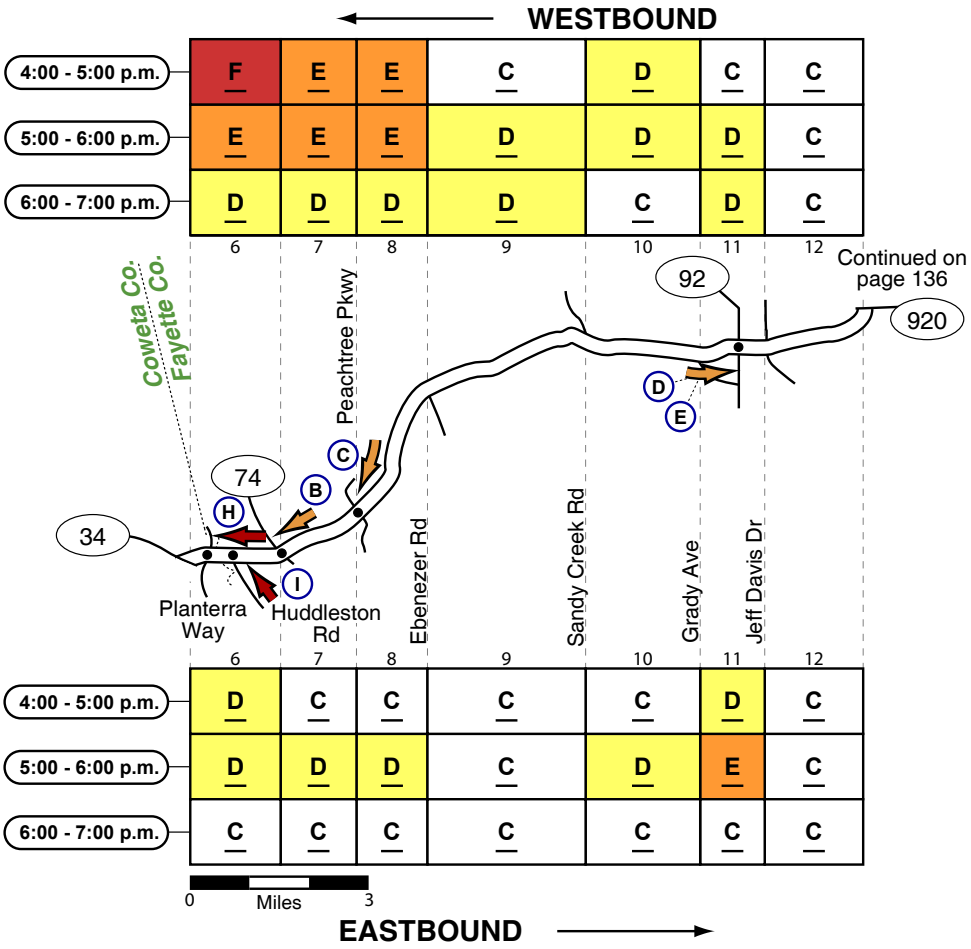
A
Congestion Type: Cross Road Signal Queue
Location: SR 16
Frequency: Peak hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between Fischer Rd & SR 74
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 40 to 60 vpl
Number of Lanes: 2

Spring 2008

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Evening





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 54 Coweta/Fayette/Clayton & Fulton Counties) - Evening

B
Congestion Type: Mainline Signal Queue
Location: SR 74
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Peachtree Parkway
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

E
Congestion Type: Left-Turn Queue
Location: SR 92
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: SR 16
Frequency: Peak hour
Direction: Southbound
Queue Population: 25 to 40 vpl
Number of Lanes: 1

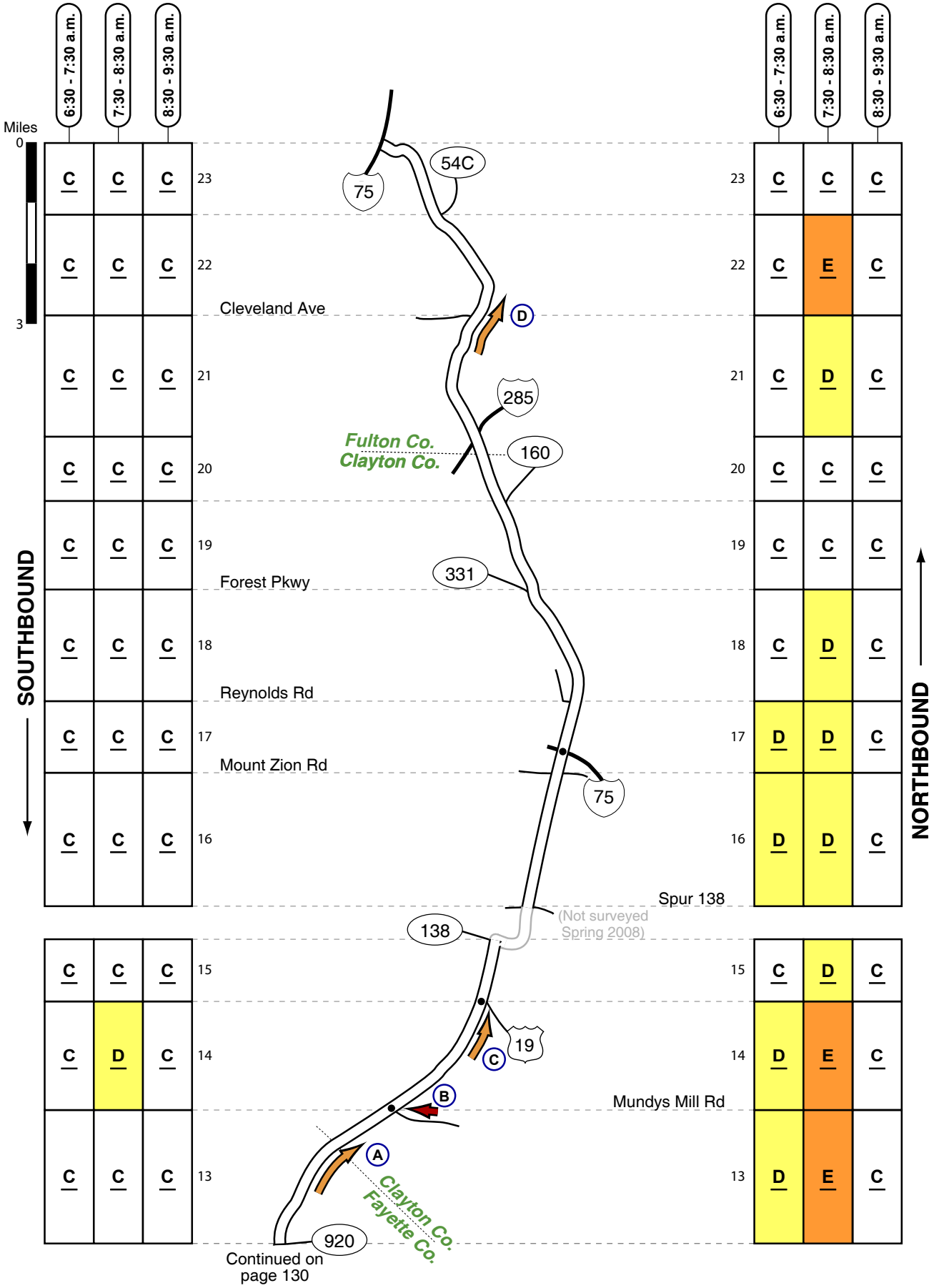
G
Congestion Type: Cross Road Signal Queue
Location: SR 16
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Signal Queue
Location: Huddleston Rd & Planterra Way
Frequency: On some days but not others
Direction: Westbound
Queue Population: 40 to 60 vpl
Number of Lanes: 2
Note: When congested, the queue extended back through one or more upstream signals.

I
Congestion Type: Cross Road Signal Queue
Location: Huddleston Rd
Frequency: Most observations before 6:00 p.m.
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Morning



Continued on page 130

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 54 Coweta/Fayette/Clayton & Fulton Counties) - Morning

A
Congestion Type: Platoons
Location: Between SR 920 & Mundys Mill Rd
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

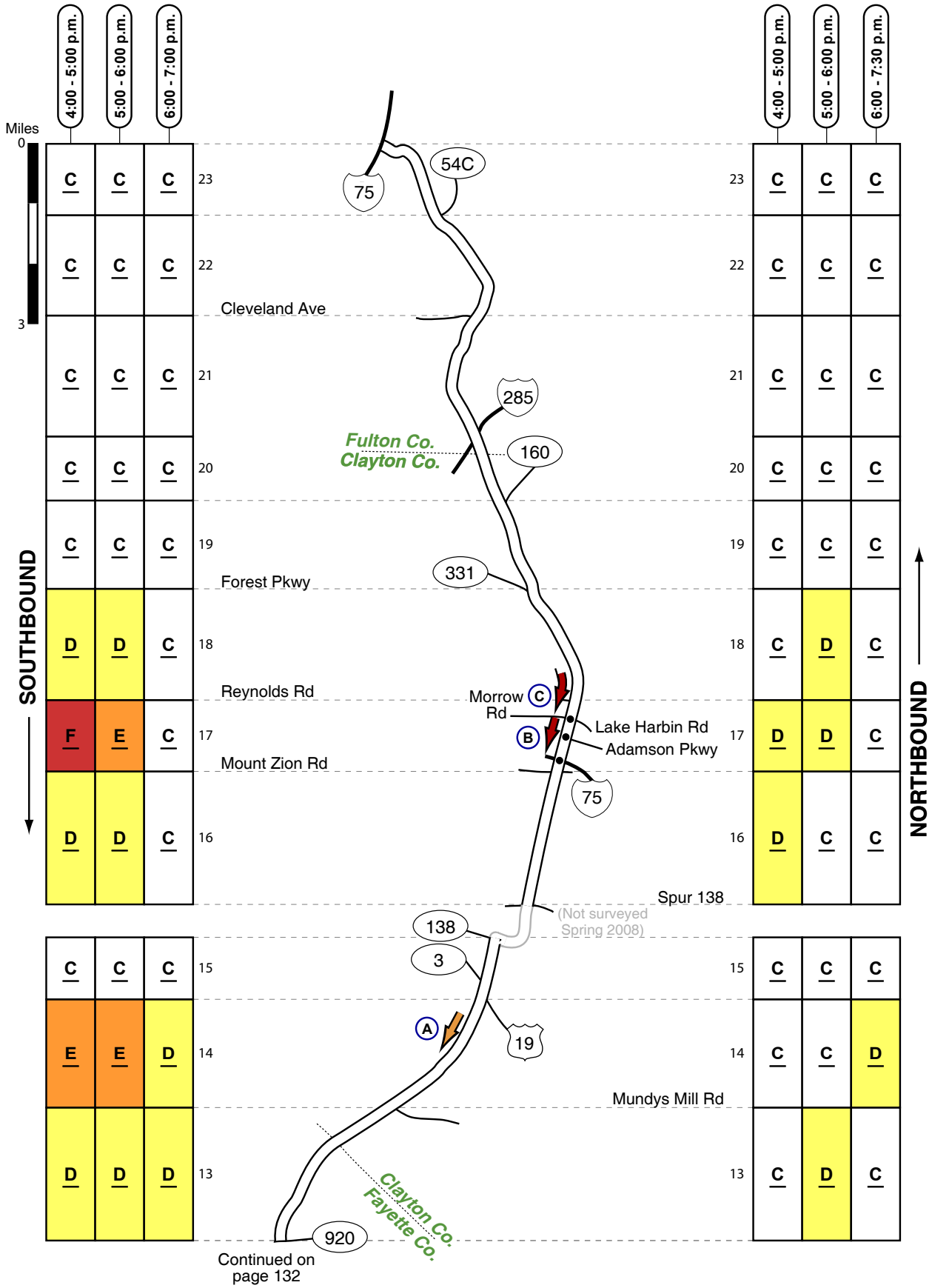
B
Congestion Type: Cross Road Signal Queue
Location: Mundys Mill Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Platoons/Mainline Signal Queue
Location: Between Mundys Mill Rd & US 19
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 75 vpl
Number of Lanes: 1
Note: Congestion was found during three observations; during one observation, approximately 20 vehicles were queued at the signal at US 19. During the peak hour, large platoons were typically found approaching US 19; school buses appeared to exacerbate the congestion.

D
Congestion Type: Platoons
Location: Vicinity of Cleveland Ave
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 54 (Coweta/Fayette/Clayton & Fulton Counties) - Evening



Continued on page 132

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 54 Coweta/Fayette/Clayton & Fulton Counties) - Evening

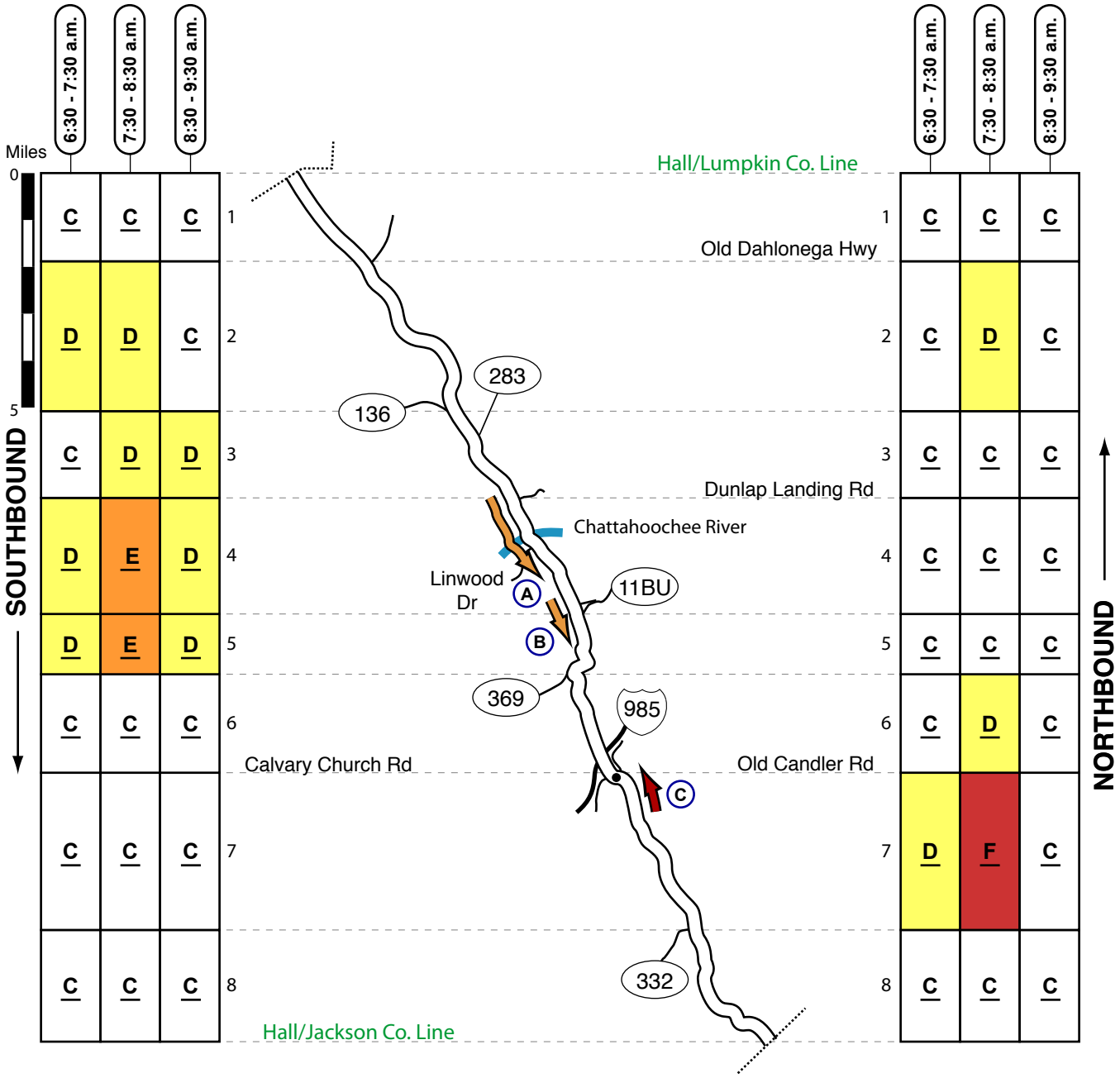
A
Congestion Type: Platoons
Location: Between US 19 & Mundys Mill Rd
Frequency: Most observations
Direction: Southbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: I-75/Adamson Parkway
Frequency: On some days but not others
Direction: Southbound
Queue Population: 35 to 55 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Morrow Rd
Frequency: On some days but not others
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

Spring 2008

SR 60 (Hall County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 60 (Hall County) - Morning

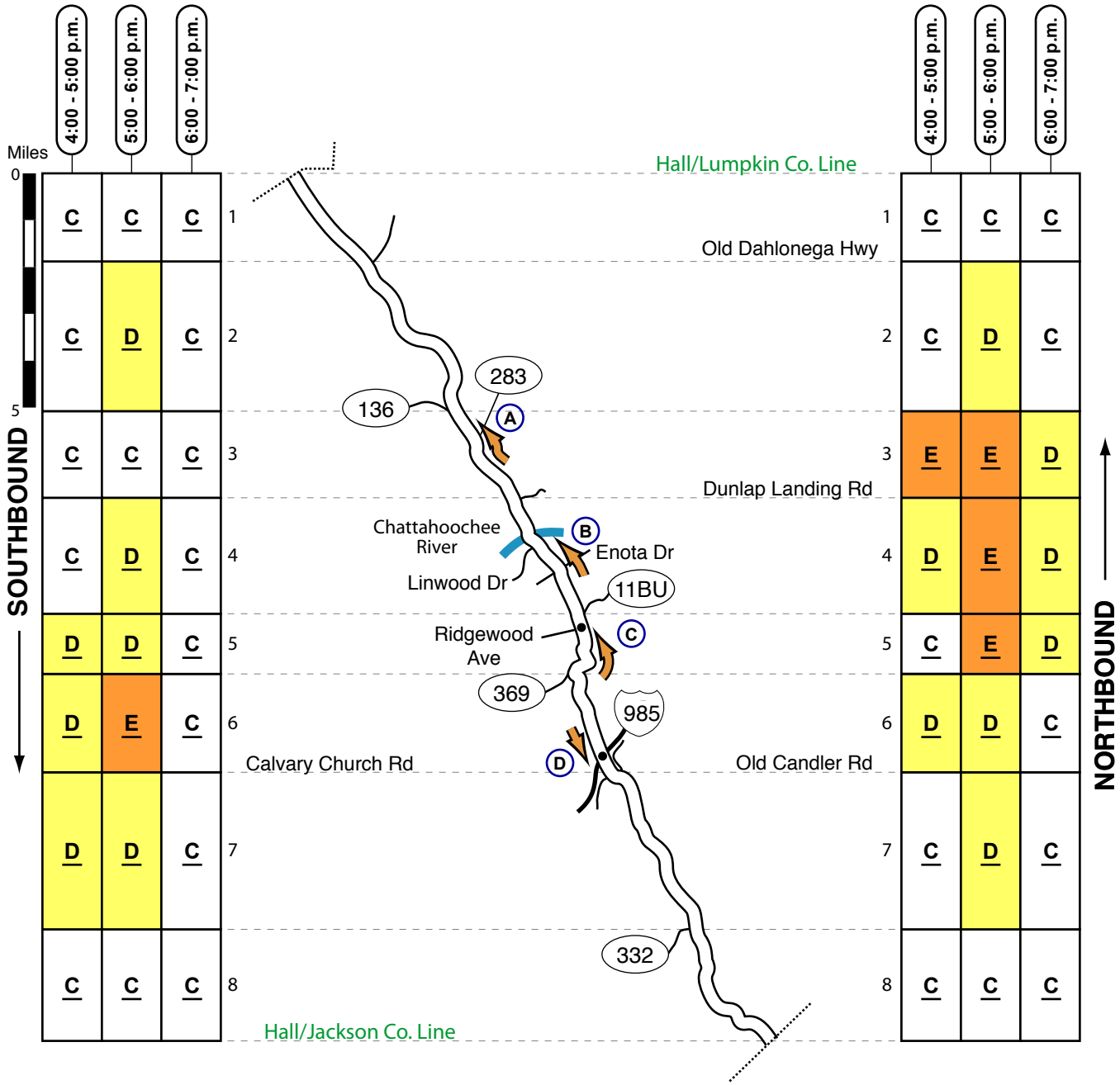
A
Congestion Type: Platoons
Location: Between Dunlap Landing Rd
& SR 11 Business
Frequency: Peak Hour
Direction: Southbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 2
Note: During one observation only
(March 5th at 7:42 a.m.), approximately
80 vehicles were queued at the signal
at Linwood Dr.

B
Congestion Type: Platoons
Location: Between SR 11 Business
& SR 369
Frequency: Peak Hour
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Old Candler Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 35 to 50 vpl
Number of Lanes: 1

Spring 2008

SR 60 (Hall County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 60 (Hall County) - Evening

A
Congestion Type: Platoons
Location: Between Dunlap Landing Rd
& SR 136
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

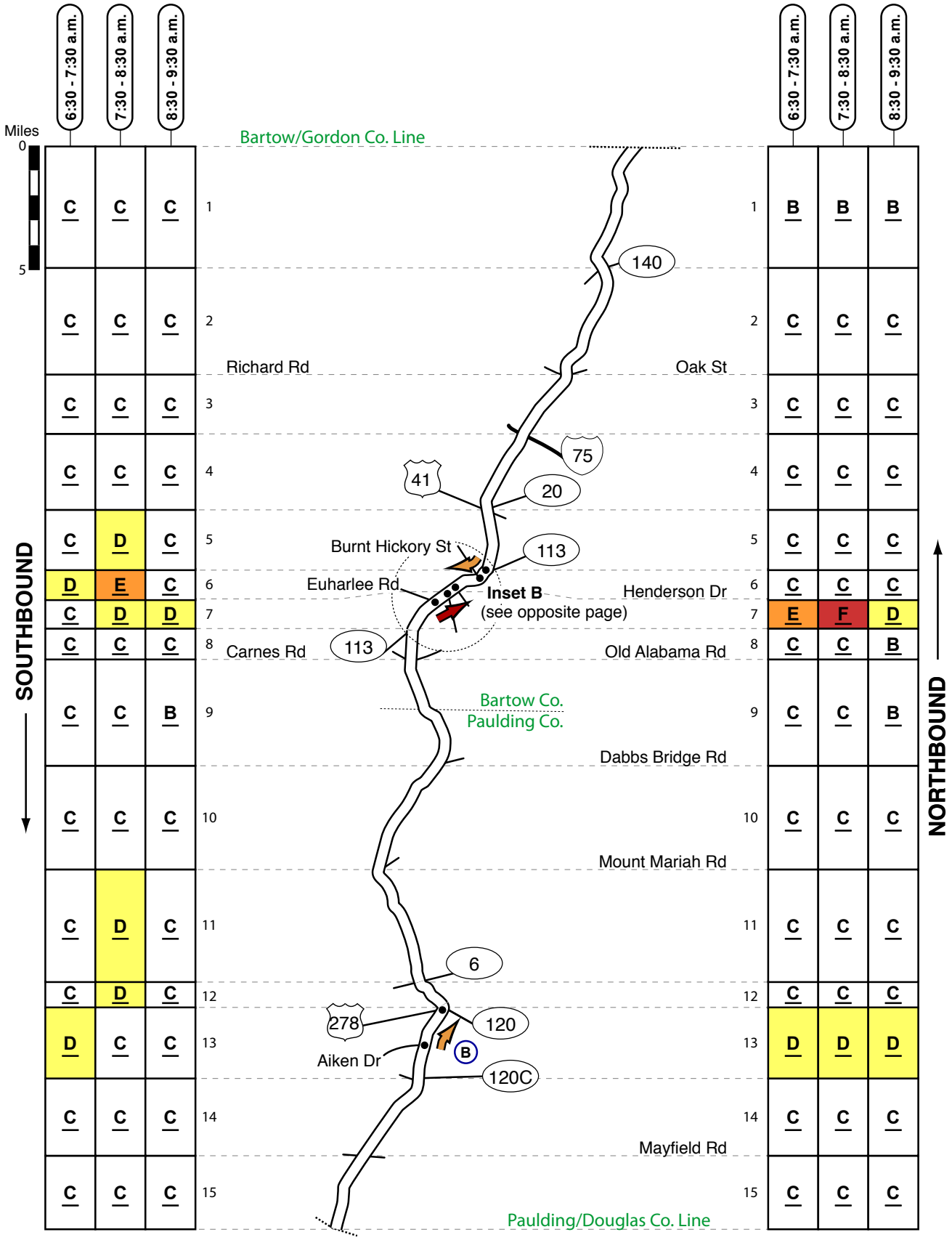
B
Congestion Type: Platoons
Location: Between SR 11 Business &
Dunlap Landing Rd
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Ridgewood Ave
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: I-985
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

Spring 2008

SR 61 (Bartow & Paulding Counties) - Morning



Segment	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
1	C	C	C	B	B	B
2	C	C	C	C	C	C
3	C	C	C	C	C	C
4	C	C	C	C	C	C
5	C	D	C	C	C	C
6	D	E	C	C	C	C
7	C	D	D	E	F	D
8	C	C	C	C	C	B
9	C	C	B	C	C	B
10	C	C	C	C	C	C
11	C	D	C	C	C	C
12	C	D	C	C	C	C
13	D	C	C	D	D	D
14	C	C	C	C	C	C
15	C	C	C	C	C	C

Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 61 (Bartow & Paulding Counties) - Morning

B
Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: One time only
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

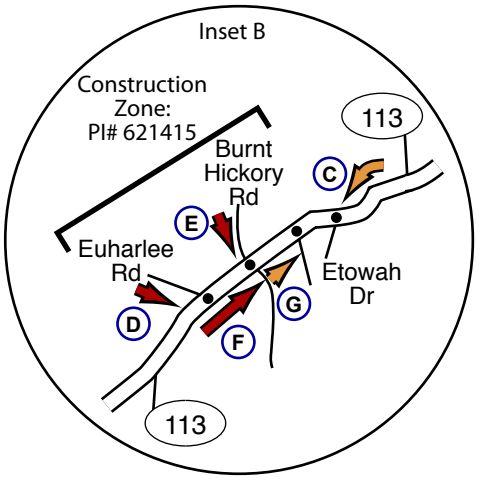
C
Congestion Type: Mainline Signal Queue
Location: Etowah Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: Euharlee Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: Construction along this section of SR 113 exacerbated congestion on Euharlee Rd; during one observation at 6:50 a.m., vehicles were queued at the train crossing located just before SR 113.

E
Congestion Type: Cross Road Signal Queue
Location: Burnt Hickory Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1
Note: Construction along this section of SR 113 exacerbated congestion on Burnt Hickory Rd; during one observation at 6:50 a.m., vehicles were queued at the train crossing located just before SR 113.

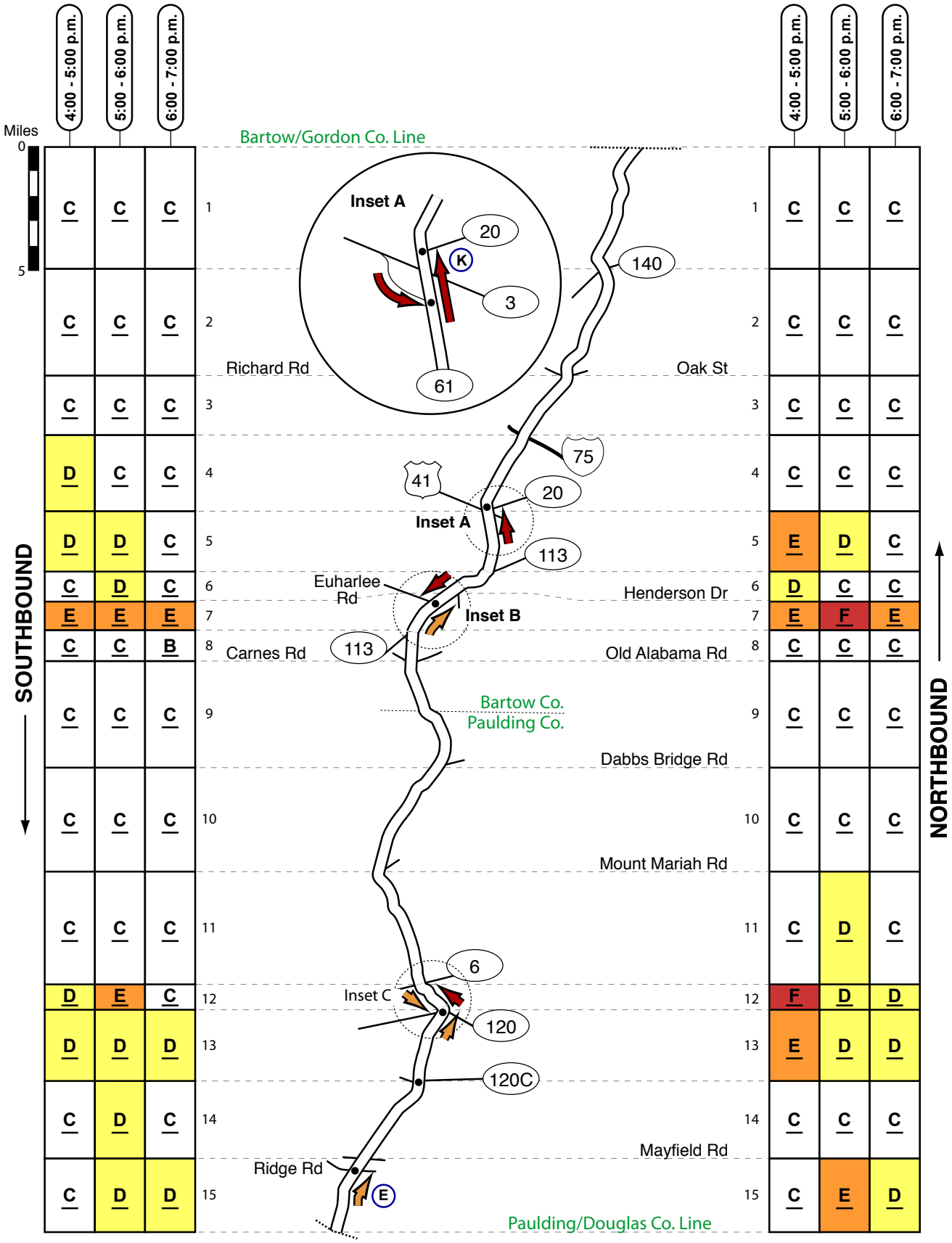
F
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd & Euharlee Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 30 to 120 vpl
Number of Lanes: 1
Note: During the peak period, northbound congestion approaching Burnt Hickory Rd typically extended back through the upstream signal at Euharlee Rd. Construction (widening) along this section of SR 113 exacerbated the congestion.

G
Congestion Type: Mainline Signal Queue
Location: Henderson Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 exacerbated the congestion at Henderson Dr.



Spring 2008

SR 61 (Bartow & Paulding Counties) - Evening



Segment	SOUTHBOUND 4:00 - 5:00 p.m.	SOUTHBOUND 5:00 - 6:00 p.m.	SOUTHBOUND 6:00 - 7:00 p.m.	NORTHBOUND 4:00 - 5:00 p.m.	NORTHBOUND 5:00 - 6:00 p.m.	NORTHBOUND 6:00 - 7:00 p.m.
1	C	C	C	C	C	C
2	C	C	C	C	C	C
3	C	C	C	C	C	C
4	D	C	C	C	C	C
5	D	D	C	E	D	C
6	C	D	C	D	C	C
7	E	E	E	E	F	E
8	C	C	B	C	C	C
9	C	C	C	C	C	C
10	C	C	C	C	C	C
11	C	C	C	C	D	C
12	D	E	C	F	D	D
13	D	D	D	E	D	D
14	C	D	C	C	C	C
15	C	D	D	C	E	D

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 61 (Bartow & Paulding Counties) - Evening

K
Congestion Type: Mainline Signal Queue
Location: SR 20
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: During some observations, northbound congestion on SR 61 appeared to adversely affect queuing on the SR 3 southbound exit ramp; it appeared that a limited number of vehicles on the ramp could clear the signal during the green phase due to the merge into congestion on SR 61.

A
Congestion Type: Mainline Signal Queue
Location: SR 61
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: SR 120
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Congestion was found in the left turn lane.

E
Congestion Type: Mainline Signal Queue
Location: Ridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

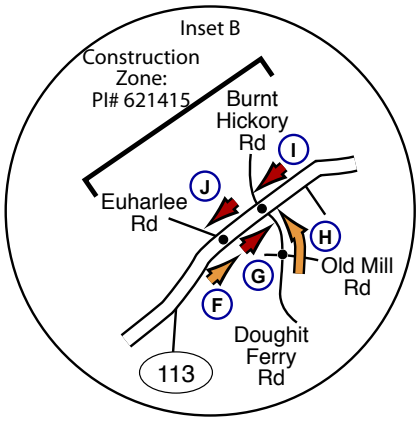
F
Congestion Type: Mainline Signal Queue
Location: Euharlee Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 exacerbated the congestion.

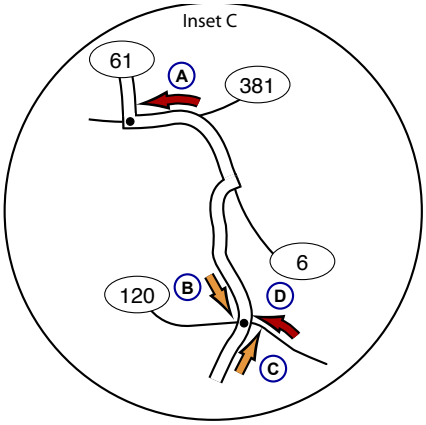
G
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 exacerbated the congestion.

H
Congestion Type: Cross Road Signal Queue
Location: Doughit Ferry Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, the queue typically extended back through the upstream signal at Old Mill Rd. Construction (widening) along this section of SR 113 likely exacerbated the congestion.

I
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 may have exacerbated the congestion.

J
Congestion Type: Mainline Signal Queue
Location: Euharlee Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 may have exacerbated the congestion.

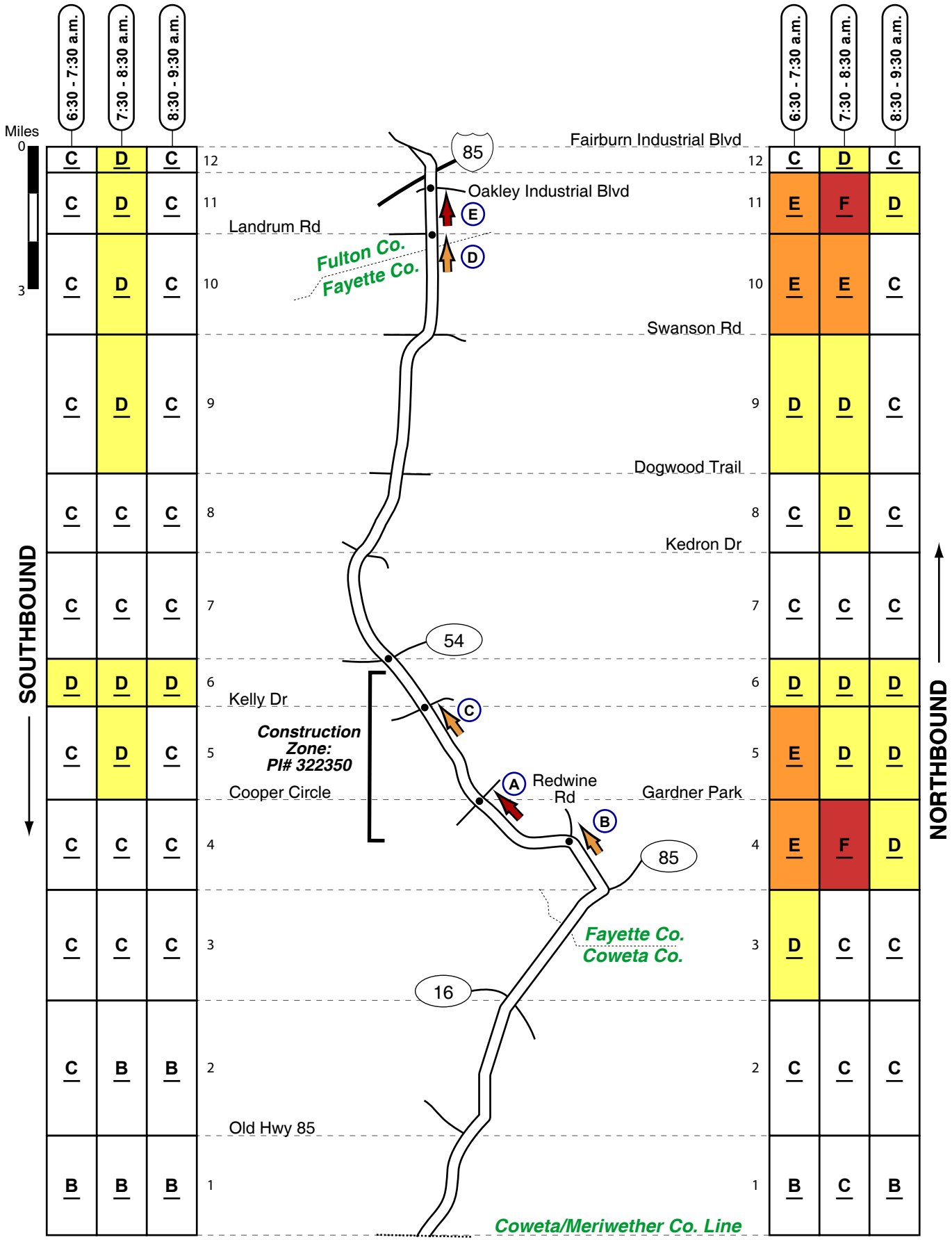




Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 74 (Fulton/Fayette & Coweta Counties) - Morning



Mile	SOUTHBOUND 6:30 - 7:30 a.m.	SOUTHBOUND 7:30 - 8:30 a.m.	SOUTHBOUND 8:30 - 9:30 a.m.	NORTHBOUND 6:30 - 7:30 a.m.	NORTHBOUND 7:30 - 8:30 a.m.	NORTHBOUND 8:30 - 9:30 a.m.
12	C	D	C	C	D	C
11	C	D	C	E	F	D
10	C	D	C	E	E	C
9	C	D	C	D	D	C
8	C	C	C	C	D	C
7	C	C	C	C	C	C
6	D	D	D	D	D	D
5	C	D	C	E	D	D
4	C	C	C	E	F	D
3	C	C	C	D	C	C
2	C	B	B	C	C	C
1	B	B	B	B	C	B

Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 74 (Fulton/Fayette & Coweta Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Cooper Circle
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction (roadway widening) between SR 85 and SR 54

B
Congestion Type: Mainline Signal Queue
Location: Redwine Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Kelly Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

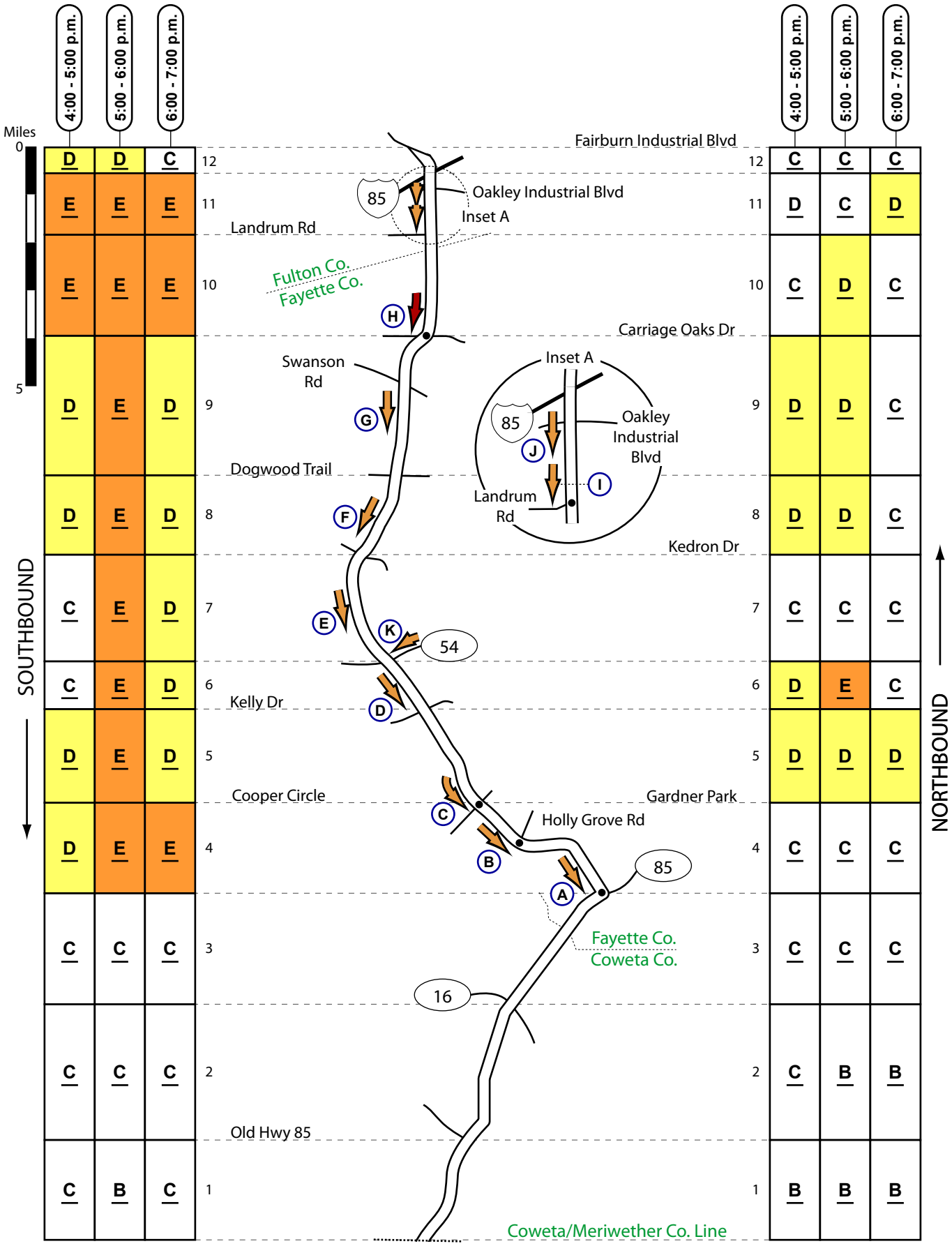
D
Congestion Type: Mainline Signal Queue/ Platoons
Location: Landrum Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 45 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Oakley Industrial Blvd
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

Construction Zone
PI# 322350
Description: Roadway Widening

Spring 2008

SR 74 (Fulton/Fayette & Coweta Counties) - Evening



Mile	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.
12	D	D	C	C	C	C
11	E	E	E	D	C	D
10	E	E	E	C	D	C
9	D	E	D	D	D	C
8	D	E	D	D	D	C
7	C	E	D	C	C	C
6	C	E	D	D	E	C
5	D	E	D	D	D	D
4	D	E	E	C	C	C
3	C	C	C	C	C	C
2	C	C	C	C	B	B
1	C	B	C	B	B	B

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 74 (Fulton/Fayette & Coweta Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 85
Frequency: One time only (March 13th at 6:01 p.m.)
Direction: Southbound
Queue Population: 40 to 45 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Holly Grove Rd
Frequency: One time only (March 11th at 5:24 p.m.)
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Cooper Circle
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between SR 54 & Kelly Dr
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

E
Congestion Type: Platoons
Location: Between Kedron Dr & SR 54
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

F
Congestion Type: Platoons
Location: Between Dogwood Trail & Kedron Dr
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

G
Congestion Type: Platoons
Location: Between Swanson Rd & Dogwood Trail
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue/Platoons
Location: Carriage Oaks Dr
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: Landrum Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Platoons
Location: Between I-85 & Landrum Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

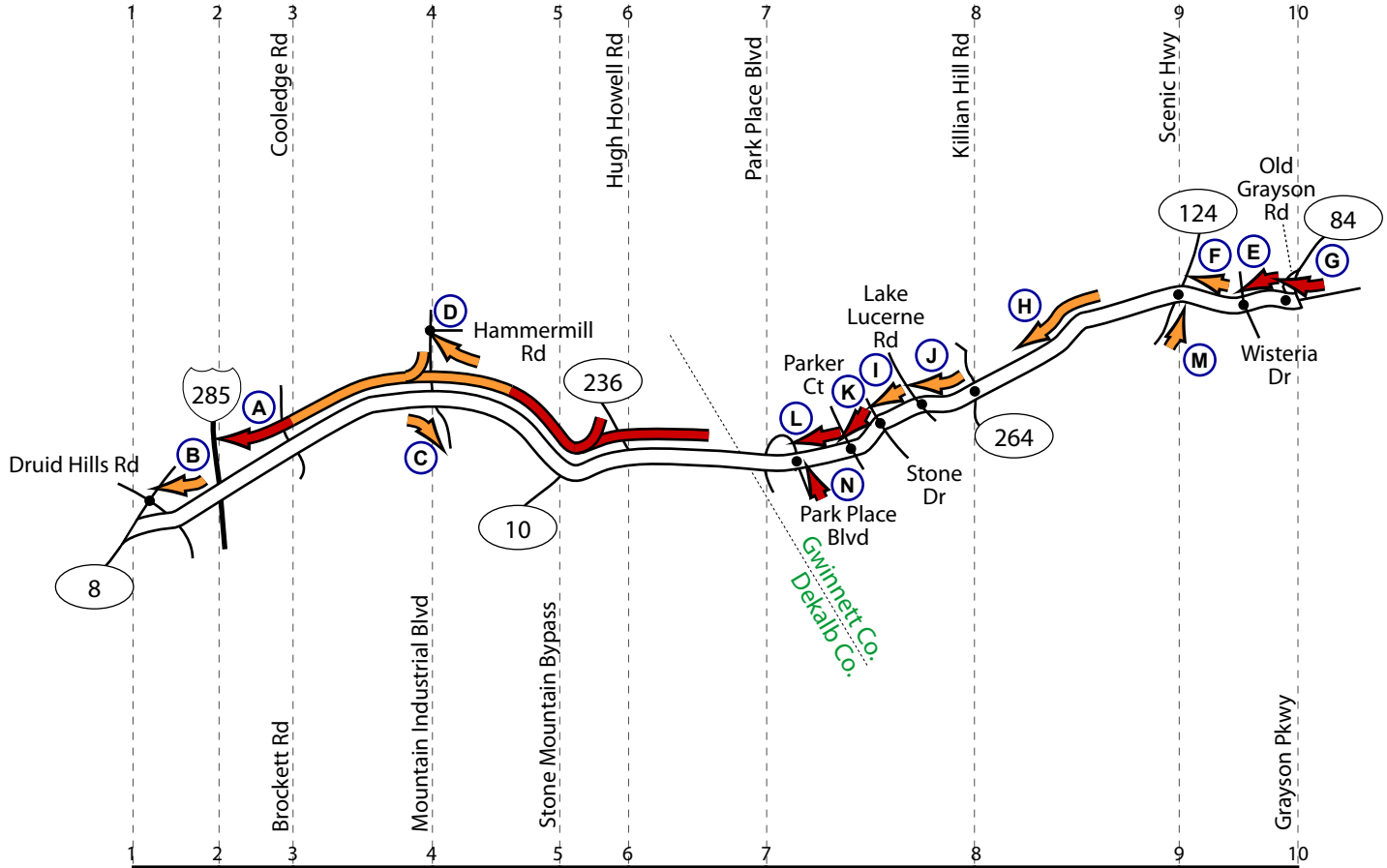
K
Congestion Type: Cross Road Signal Queue
Location: SR 54
Frequency: Intermittent
Direction: Westbound
Platoon Population: 20 to 40 vpl
Number of Lanes: 2

Fall 2007

US 78 (Dekalb & Gwinnett Counties) - Morning

WESTBOUND

	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10
6:30 - 7:30 a.m.	B	2,4 F(55)	F (55)	F (50)	E 4	D	F	E	E
7:30 - 8:30 a.m.	C	2,4 F(55)	F (55)	F (55)	F 4 (60)	E	F	E	E
8:30 - 9:30 a.m.	B	D 2,4	D	D	C	C	E	D	E



	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10
6:30 - 7:30 a.m.	A	A	A	A	A	A	C	C	C
7:30 - 8:30 a.m.	A	A	A	A	A	A	C	C	C
8:30 - 9:30 a.m.	A	A	A	A	A	A	C	C	C

0 Miles 5

EASTBOUND

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

US 78 (Dekalb & Gwinnett Counties) - Morning

A
Congestion Type: Mainline Congestion
Frequency: Most observations before 9:00 a.m.
Direction: Westbound
Location: Between Park Place Blvd and I-285
Queue Length: 5 to 8 miles
Estimated Speed: 20 to 50 mph
Potential Cause(s): Factors contributing to the congestion included: 1) congestion on the ramp to northbound I-285 backed into the right two lanes on US 78 and ultimately across all three lanes; 2) traffic entering the mainline at Stone Mountain Industrial Blvd and SR 10 (Stone Mountain Blvd).

B
Congestion Type: Exit Ramp Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 45 vpl
Number of Lanes: Two
Note: When congested, the head of the ramp queue was found on westbound Druid Hills Rd at the signal at SR 8.

C
Congestion Type: Exit Ramp Queue
Location: Mountain Industrial Blvd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: Two
Note: When congested, vehicles were queued in the left two lanes at the signal at the head of the ramp.

D
Congestion Type: Exit Ramp Queue
Location: Mountain Industrial Blvd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: One
Note: When congested, vehicles were queued in the right lane on the ramp waiting to turn northbound on Mountain Industrial Blvd; the head of the queue was found on Mountain Industrial Blvd at the signal at Hammermill Rd.

E
Congestion Type: Signal Queue
Location: Wisteria Dr
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

F
Congestion Type: Signal Queue
Location: SR 124
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Old Grayson Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2

H
Congestion Type: Platoons
Location: Between SR 124 & SR 264
Frequency: Intermittent
Direction: Westbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

I
Congestion Type: Signal Queue
Location: Stone Dr
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 3

J
Congestion Type: Signal Queue
Location: Lake Lucerne Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

K
Congestion Type: Signal Queue
Location: Parker Ct
Frequency: Most observations
Direction: Westbound
Queue Populations: 35 to 50 vpl
Number of Lanes: 3

L
Congestion Type: Signal Queue
Location: Park Place Blvd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 3

M
Congestion Type: Congested Cross Road
Location: SR 124
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

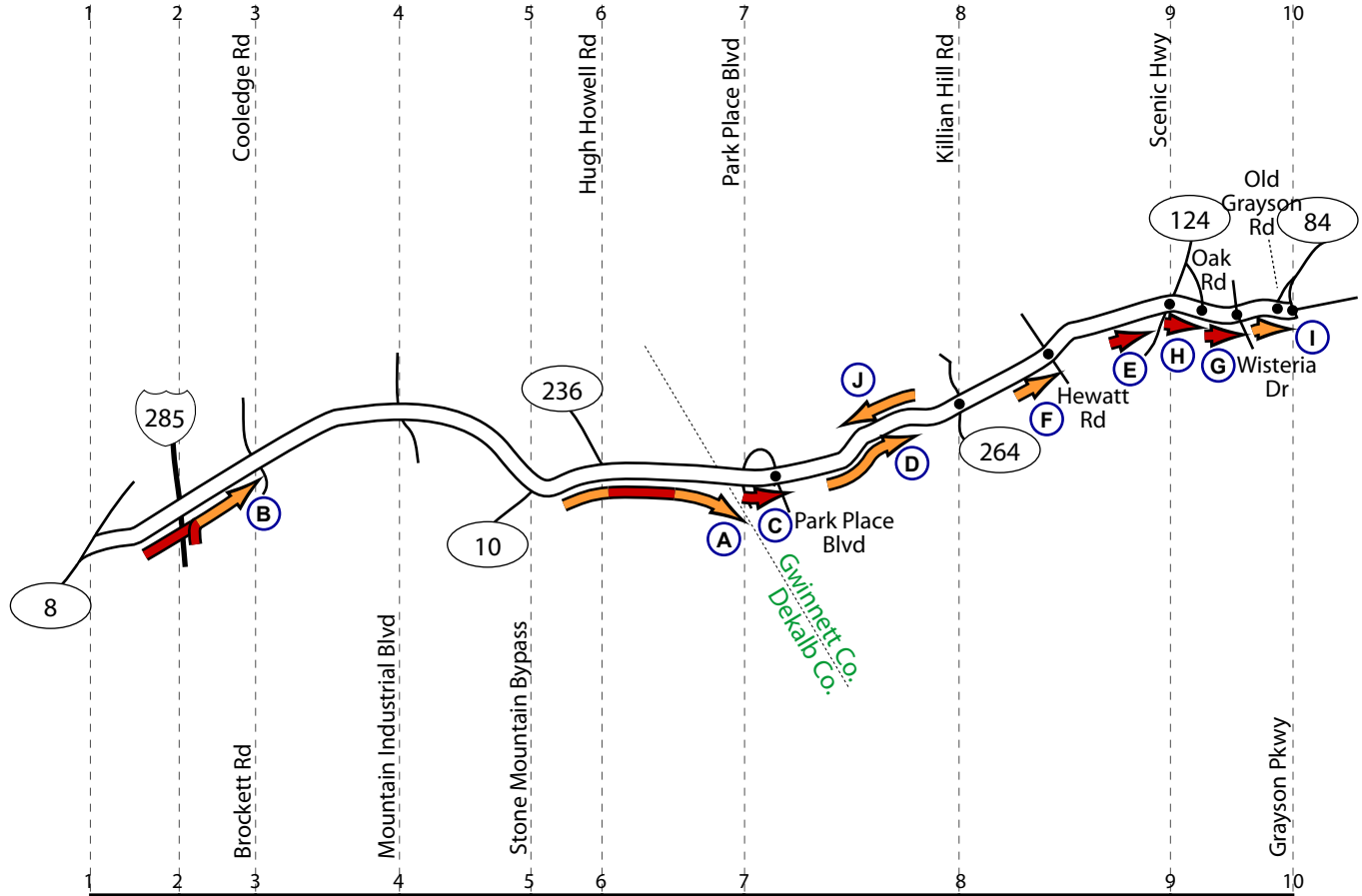
N
Congestion Type: Congested Cross Road
Location: Park Place Blvd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion extended back through the upstream signal at Rockbridge Rd.

Fall 2007

US 78 (Dekalb & Gwinnett Counties) - Evening

WESTBOUND

	1	2	3	4	5	6	7	8	9	10
4:00 - 5:00 p.m.	A	A	B	A	A	A	D	D	D	
5:00 - 6:00 p.m.	A	B	B	A	A	A	D	D	D	
6:00 - 7:00 p.m.	A	A	A	A	A	A	E	D	D	



	1	2	3	4	5	6	7	8	9	10
4:00 - 5:00 p.m.	C	B	C	C	B	D	E	D	E	
5:00 - 6:00 p.m.	D	F (50)	D[4]	C	C	F[2,4] (55)	F	E	F	
6:00 - 7:00 p.m.	C	B	C	C	C	E[2,4]	E	E	D	

0 Miles 5

EASTBOUND

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

US 78 (Dekalb & Gwinnett Counties) - Evening

A
Congestion Type: Mainline Congestion
Frequency: Most observations after 5:00 p.m.
Direction: Eastbound
Location: Between SR 236 and Park Place Blvd
Queue Length: 1 to 2 miles
Estimated Speed: 30 to 50 mph
Potential Cause(s): Congestion appeared to be exacerbated by vehicles exiting at the service road approximately one-half mile before the Park Place Blvd interchange; weaving on the approach to the exit ramp may have contributed to the congestion.

B
Congestion Type: Mainline Congestion
Frequency: Most observations between 5:00 and 6:00 p.m.
Direction: Eastbound
Location: Between I-285 and Cooledge Rd
Queue Length: 1 to 1.5 miles
Estimated Speed: 20 to 50 mph
Potential Cause(s): Congestion appeared to be caused by traffic entering the mainline from northbound I-285 and the lane drop (4 lanes to 3) at Cooledge Rd.

C
Congestion Type: Signal Queue
Location: Park Place Blvd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Platoons
Location: Between E. Park Place Blvd & SR 264
Frequency: Most observations
Direction: Eastbound
Platoon Populations: 25 to 40 vpl
Number of Lanes: 3

E
Congestion Type: Signal Queue
Location: SR 124
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

F
Congestion Type: Signal Queue
Location: Hewatt Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Wisteria Dr
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

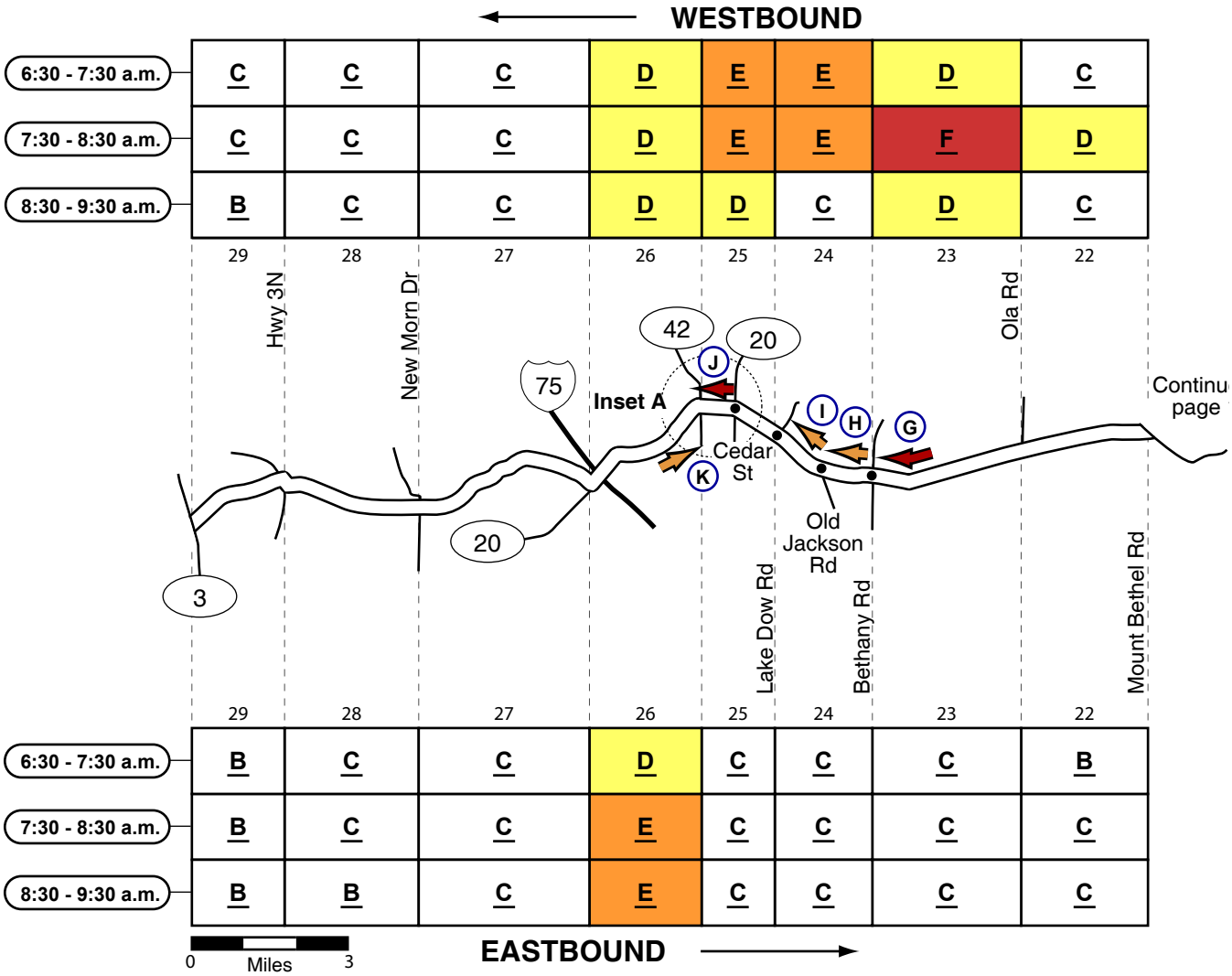
H
Congestion Type: Signal Queue
Location: Oak Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

I
Congestion Type: Signal Queue
Location: Old Grayson Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Platoons
Location: Between Killian Hill Rd and Park Place Blvd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 25 to 30 vpl
Number of Lanes: 2

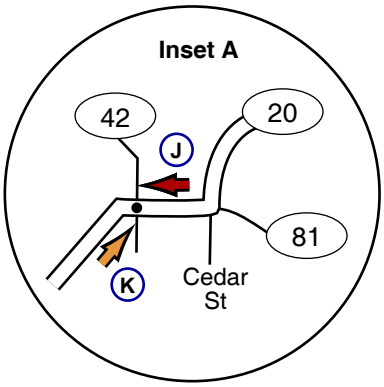
Spring 2008

SR 81 (Henry County) - Morning



	29	28	27	26	25	24	23	22
6:30 - 7:30 a.m.	C	C	C	D	E	E	D	C
7:30 - 8:30 a.m.	C	C	C	D	E	E	F	D
8:30 - 9:30 a.m.	B	C	C	D	D	C	D	C

	29	28	27	26	25	24	23	22
6:30 - 7:30 a.m.	B	C	C	D	C	C	C	B
7:30 - 8:30 a.m.	B	C	C	E	C	C	C	C
8:30 - 9:30 a.m.	B	B	C	E	C	C	C	C



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 81 (Henry County) - Morning

G
Congestion Type: Mainline Queue
Location: Approaching Bethany Rd
Frequency: On some days but not others
Direction: Westbound
Queue Population: 80 to 90 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Signal Queue
Location: Old Jackson Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

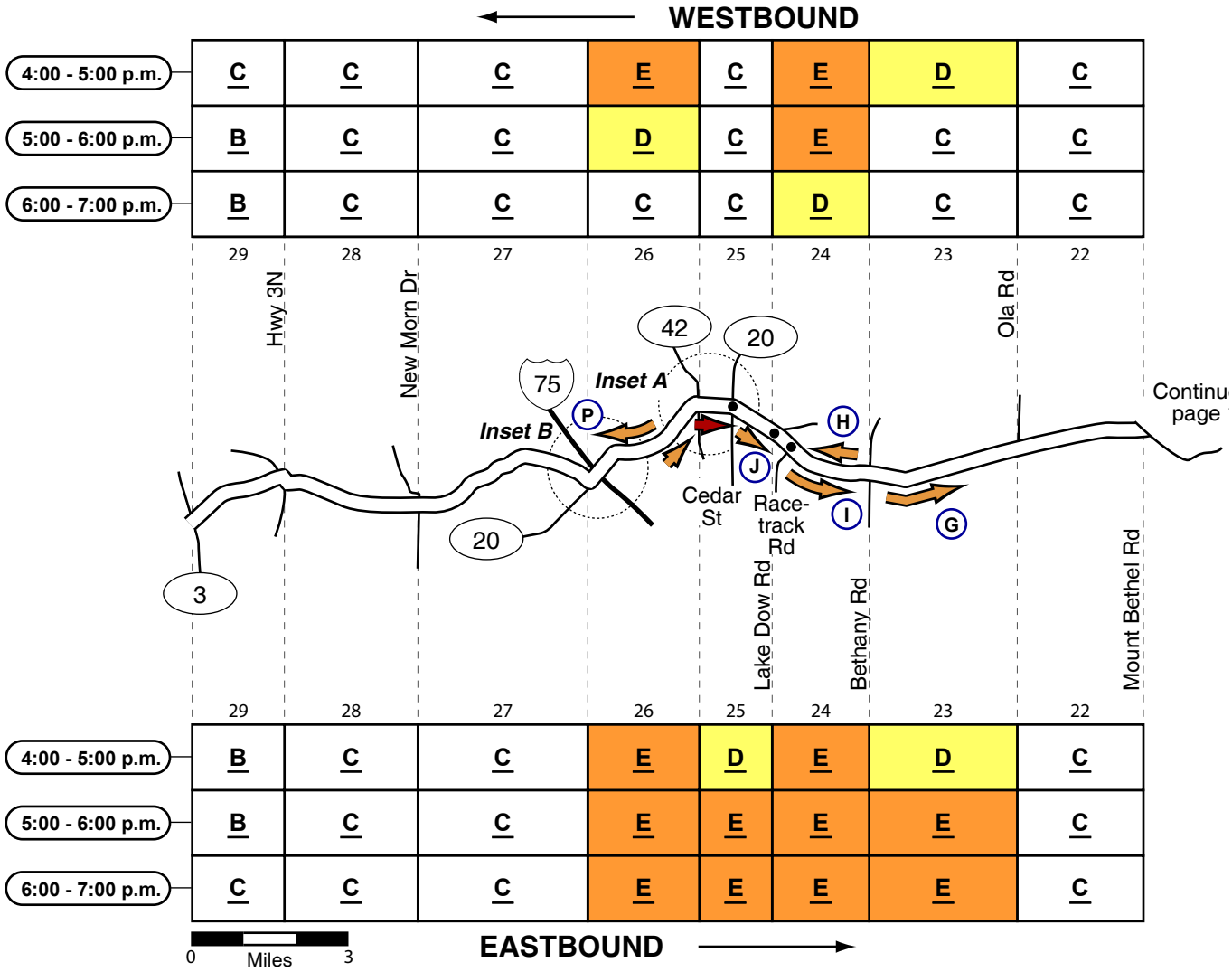
I
Congestion Type: Platoons
Location: Between Old Jackson Rd &
Lake Dow Rd
Frequency: Most observations
Direction: Westbound
Platoon Population: 30 to 40 vpl
Number of Lanes: 1

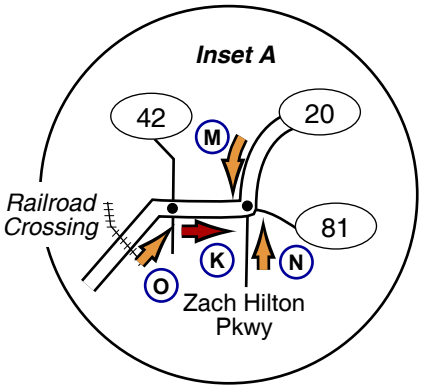
J
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found
in the one thru-lane at the signal

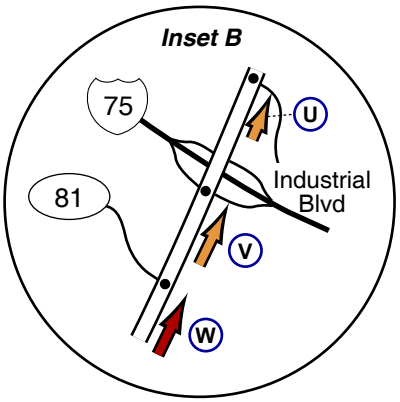
K
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 81 (Henry County) - Evening







Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 81 (Henry County) - Evening

G
Congestion Type: Platoons
Location: Between Bethany Rd & Ola Rd
Frequency: Most observations
Direction: Eastbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Queue
Location: Racetrack Rd
Frequency: On some days but not others
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion apppeared to be exacerbated by left-turning vehicles at Racetrack Rd.

I
Congestion Type: Platoons
Location: Between Lake Dow Rd & Bethany Rd
Frequency: Most observations
Direction: Eastbound
Platoon Population: 30 to 50 vpl
Number of Lanes: 1

J
Congestion Type: Mainline Queue
Location: Lake Dow Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Congestion apppeared to be exacerbated by left-turning vehicles at Lake Dow Rd.

K
Congestion Type: Mainline Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 45 vpl
Number of Lanes: 2

M
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

N
Congestion Type: Cross Road Signal Queue
Location: Zach Hilton Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

O
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

P
Congestion Type: Platoons
Location: Between SR 42 & I-75
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

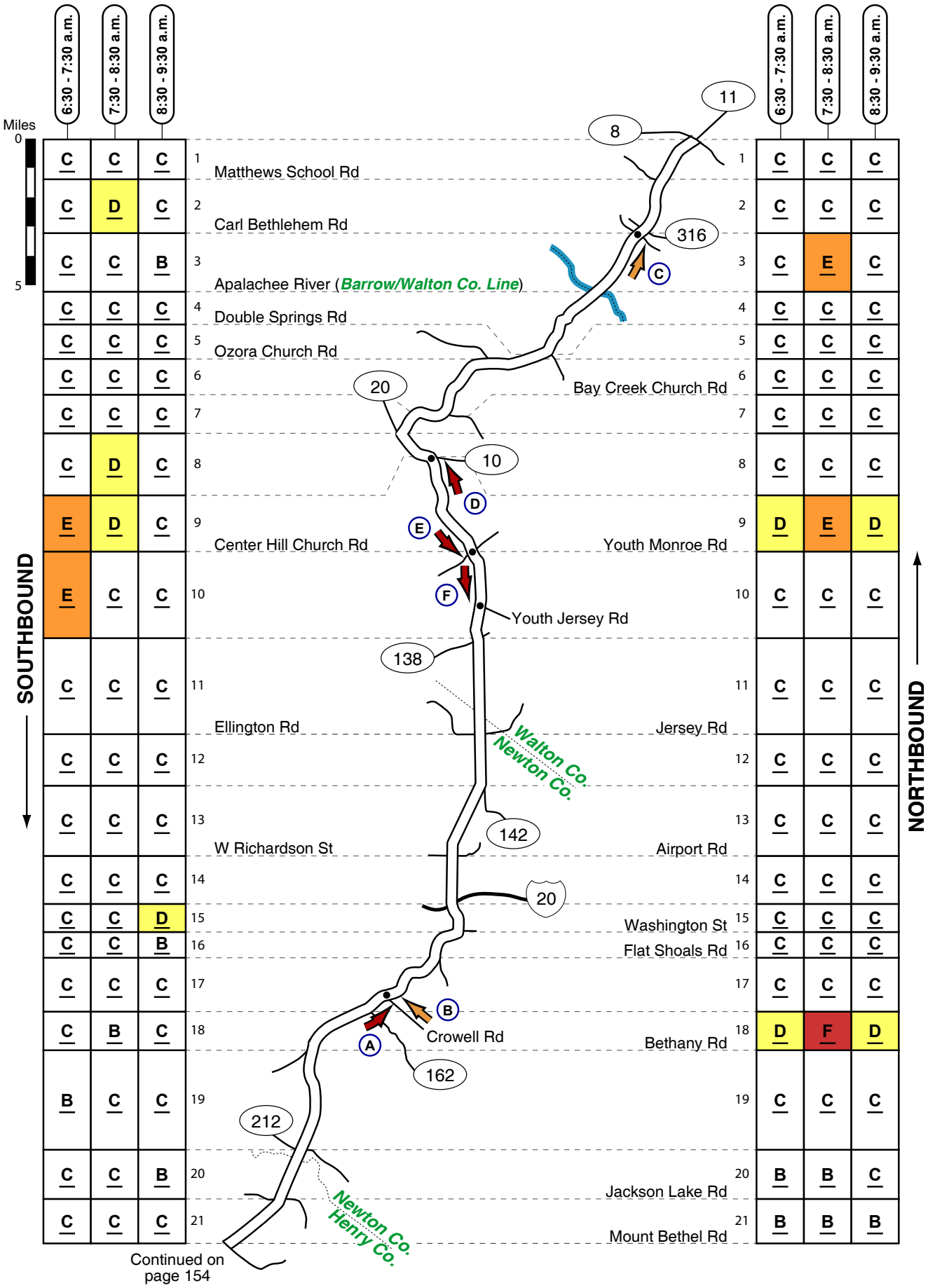
U
Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

V
Congestion Type: Mainline Signal Queue
Location: I-75
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

W
Congestion Type: Mainline Signal Queue
Location: SR 81
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

Spring 2008

SR 81 (Barrow/Walton/Newton & Henry Counties) - Morning



Continued on page 154

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 81 (Barrow/Walton/Newton & Henry Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Crowell Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Signal Queue
Location: Crowell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Carl Bethlehem Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

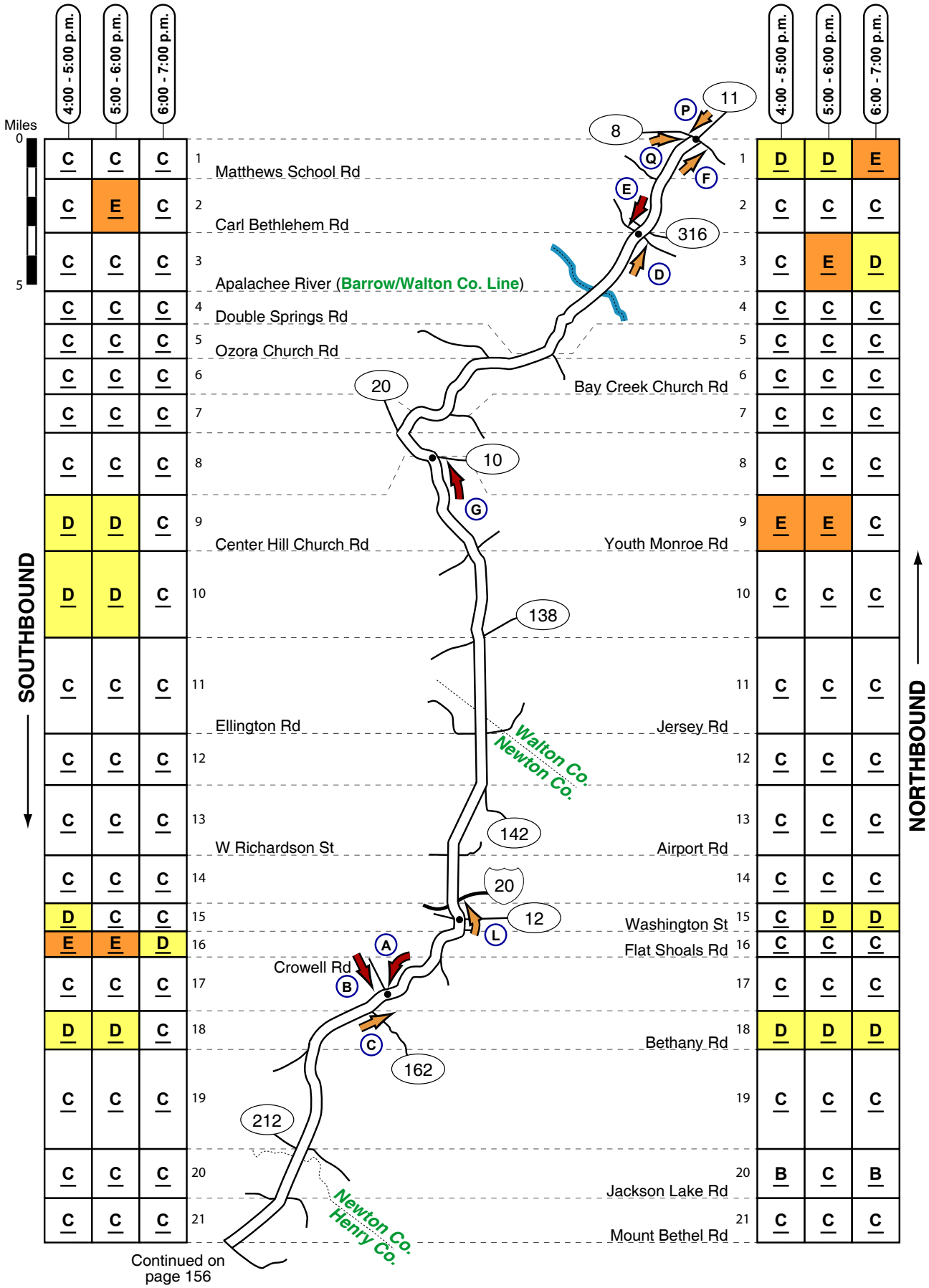
D
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: Youth Monroe Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Youth Jersey Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 60 vpl
Number of Lanes: 1

Spring 2008

SR 81 (Barrow/Walton/Newton & Henry Counties) - Evening



Continued on page 156

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 81 (Barrow/ Walton/Newton & Henry Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Crowell Rd
Frequency: Most observations before 6:00 p.m.
Direction: Southbound (Westbound)
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Signal Queue
Location: Crowell Rd
Frequency: Most observations before 6:00 p.m.
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Crowell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Carl Bethlehem Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: Carl Bethlehem Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

G
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Peak hour
Direction: Northbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

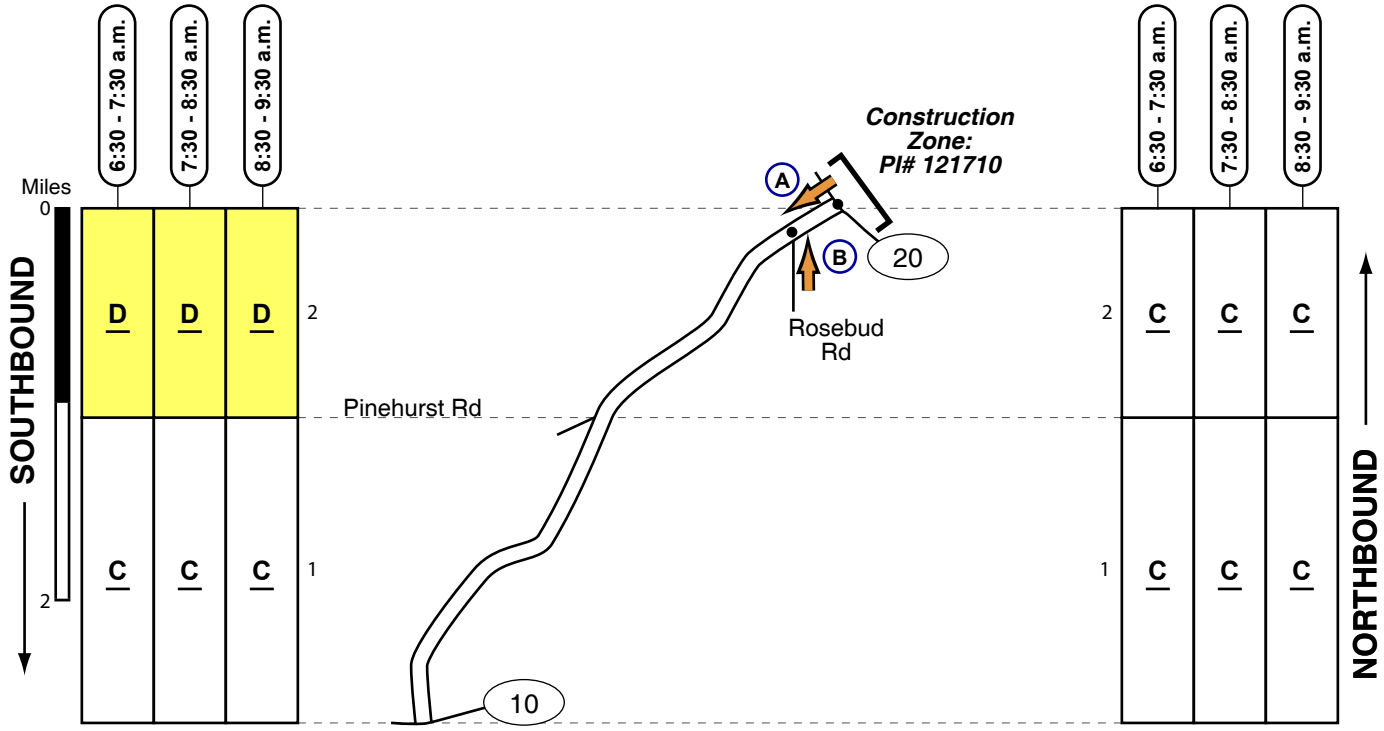
L
Congestion Type: Railroad Crossing
Location: Vicinity of SR 12
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 50 vpl
Number of Lanes: 1
Note: Congestion at the railroad crossing backed through the upstream signal at SR 12.

P
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Factors contributing to the congestion were: 1) the railroad crossing in the vicinity of SR 8 and; 2) the series of closely spaced signals approaching SR 8.

Q
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: One day only
Direction: Eastbound
Queue Population: 30 to 35 vpl
Number of Lanes: 1

Spring 2008

SR 84 (Gwinnett County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: Rosebud Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

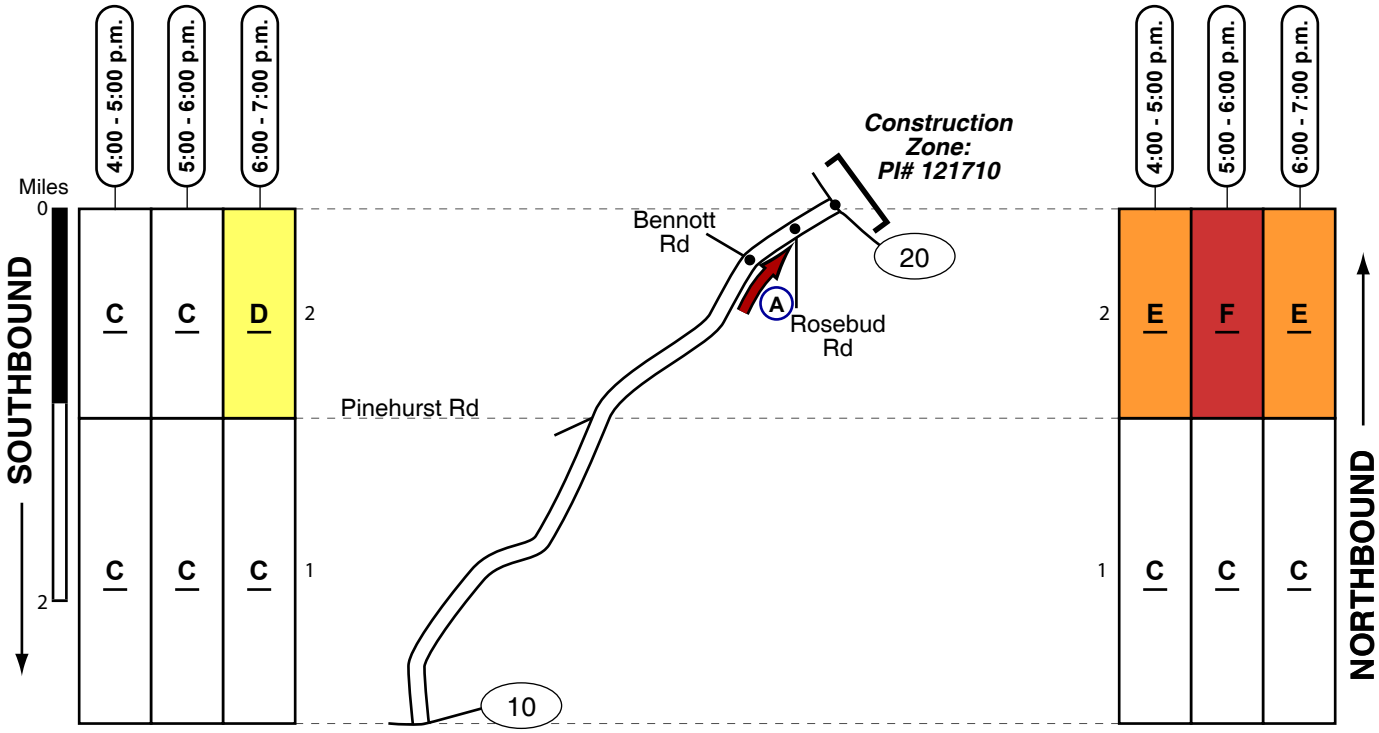
B
Congestion Type: Cross Road Signal Queue
Location: Rosebud Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Construction Zone
PI# 121710
Description: Roadway Widening on SR 20

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 84 (Gwinnett County) - Evening



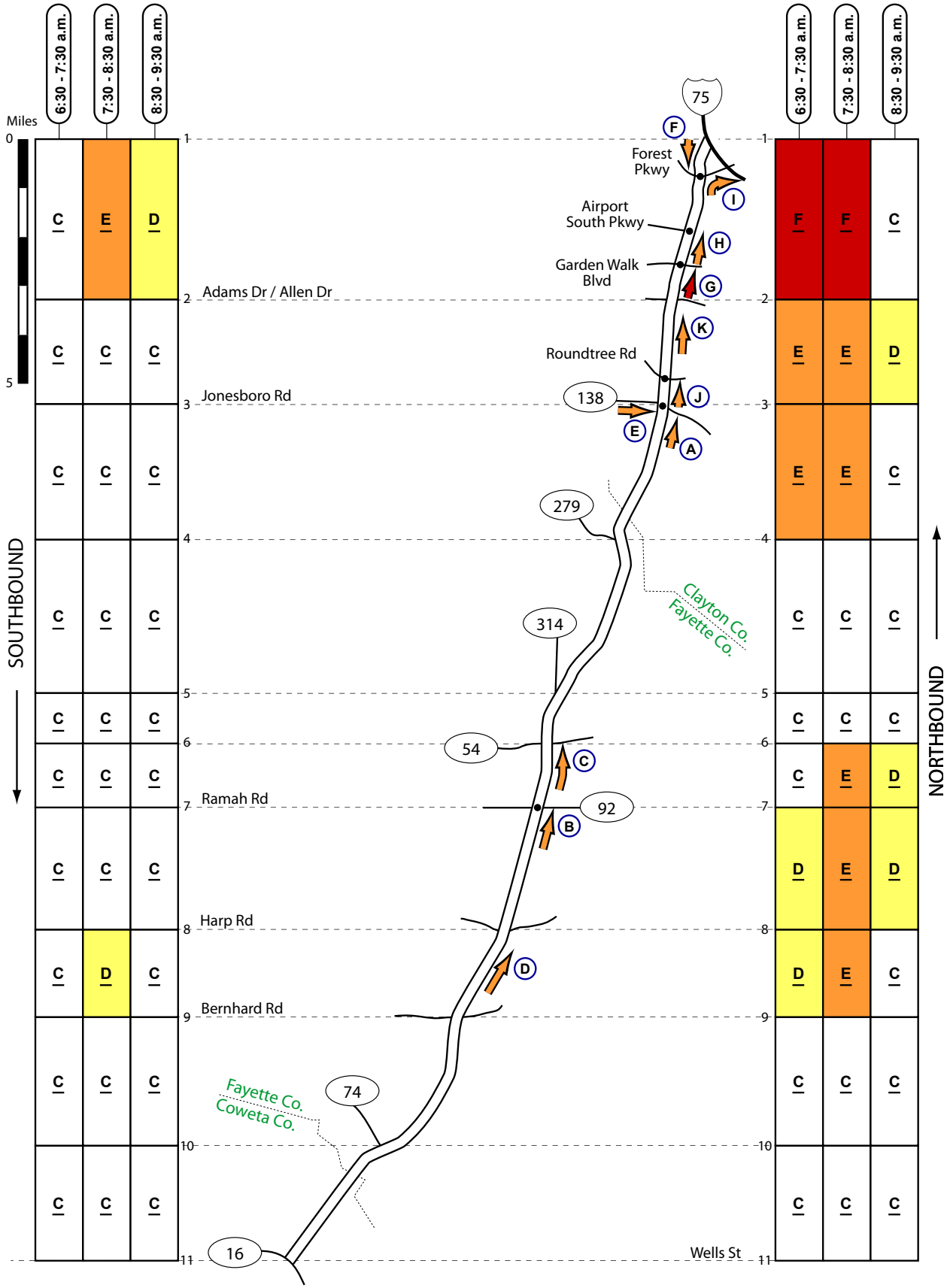
A
Congestion Type: Mainline Signal Queue
Location: Rosebud Rd
Frequency: Most Observations
Direction: Northbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically extended back through the upstream signal at Bennett Rd

Construction Zone
PI# 121710
Description: Roadway Widening on SR 20

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 85 (Clayton/Fayette & Coweta Counties) - Morning



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 85 (Clayton/Fayette & Coweta Counties) - Morning

A
Congestion Type: Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: SR 92 (Ramah Rd)
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Platoons
Location: Between SR 92 (Ramah Rd) & SR 54
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between Bernhard Rd & Harp Rd
Frequency: All observations (7:30-8:30 a.m.)
Direction: Northbound
Platoon Populations: 25 to 50 vpl
Number of Lanes: 1
Note: Platooning and queuing appeared to be caused by school buses traveling in each direction along this section of SR 85 (a school is located on the northbound side of the roadway in this highway segment).

E
Congestion Type: Congested Cross Road
Location: SR 138
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

F
Congestion Type: Signal Queue
Location: Forest Pkwy
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Garden Walk Blvd
Frequency: Most observations
Direction: Northbound
Queue Populations: 30 to 90 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Airport South Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

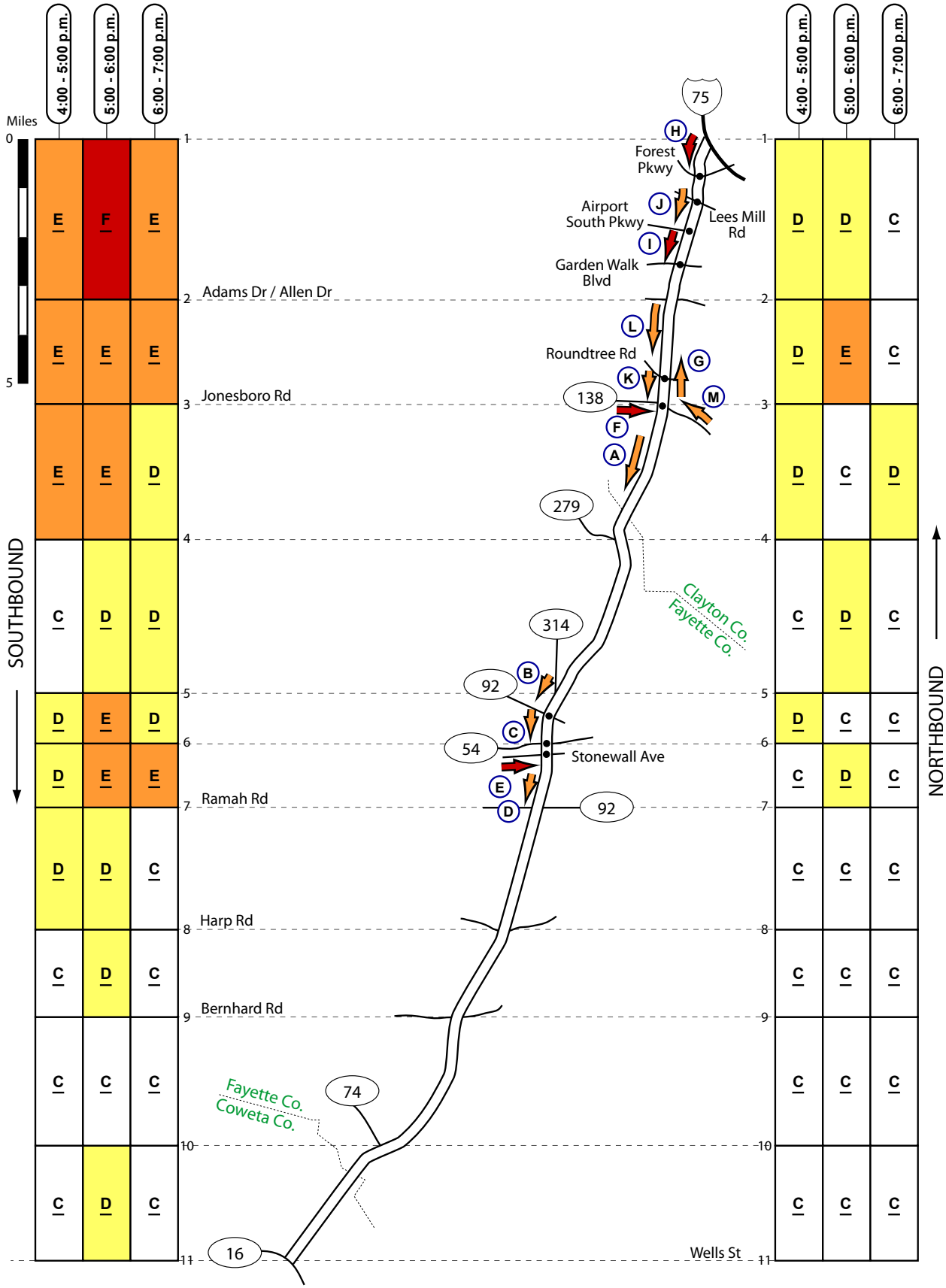
I
Congestion Type: Congestion - Right Lane
Location: Forest Pkwy
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the right lane on SR 85 approaching the intersection at Forest Pkwy; the head of the queue was intermittently found on eastbound Forest Pkwy at the ramp to southbound I-75.

J
Congestion Type: Signal Queue
Location: Roundtree Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Platoons
Location: Between Roundtree Rd & Adams Dr
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 3

Fall 2007

SR 85 (Clayton/Fayette & Coweta Counties) - Evening



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 85 (Clayton/Fayette & Coweta Counties) - Evening

A
Congestion Type: Platoons
Location: Between SR 138 & SR 279
Frequency: Intermittent
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: SR 92 (Forest Ave)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Signal Queue
Location: SR 54 (Lanier Ave)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Platoons
Location: Between SR 54 & SR 92 (Ramah Rd)
Frequency: Intermittent
Direction: Southbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Congested Cross Road
Location: Stonewall Ave
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 3

F
Congestion Type: Congested Cross Road
Location: SR 138
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue/Platoons
Location: Vicinity of Roundtree Rd
Frequency: Intermittent
Direction: Northbound
Queue/Platoon Populations: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Forest Pkwy
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

I
Congestion Type: Signal Queue
Location: Garden Walk Blvd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 80 vpl
Number of Lanes: 2
Note: During the peak period, congestion approaching Garden Walk Blvd sometimes extended back through several upstream signals.

J
Congestion Type: Platoons
Location: Between Forest Pkwy & Garden Walk Blvd
Frequency: Most observations
Direction: Southbound
Platoon Populations: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion was found at the signals at Lees Mill Rd and Airport South Pkwy; downstream congestion sometimes appeared to affect thru traffic at these signals.

K
Congestion Type: Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

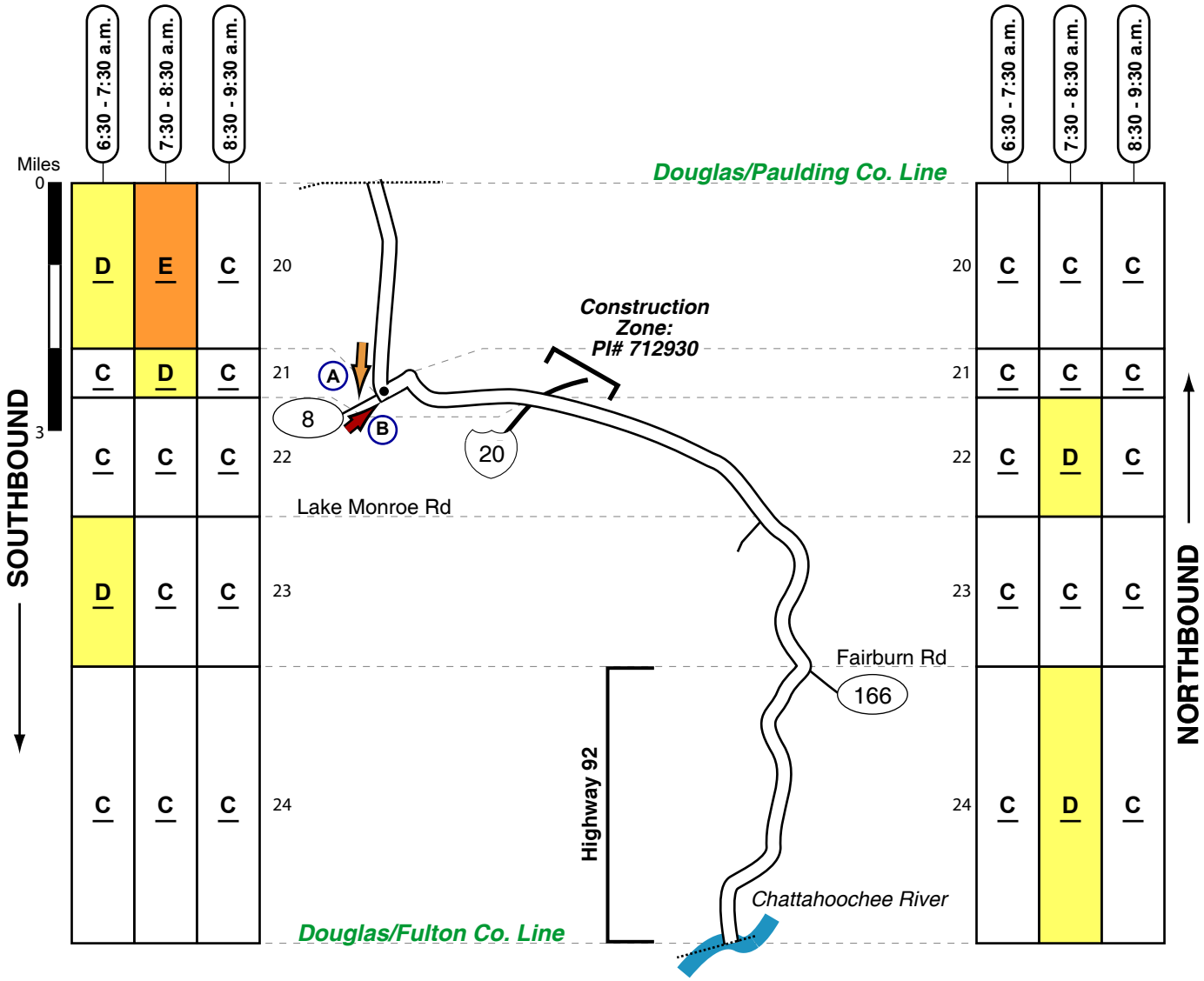
L
Congestion Type: Platoons/Queues
Location: Between Adams Dr & Roundtree Rd
Frequency: Most observations
Direction: Southbound
Platoons/Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: Intermittently, marginal southbound congestion was found approaching the signals at Roundtree Rd, Bethsaida Rd, Riverdale Rd and Howard St.

M
Congestion Type: Congested Cross Road
Location: SR 138
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

(Blank)

Spring 2008

SR 92/Highway 92 (Douglas County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

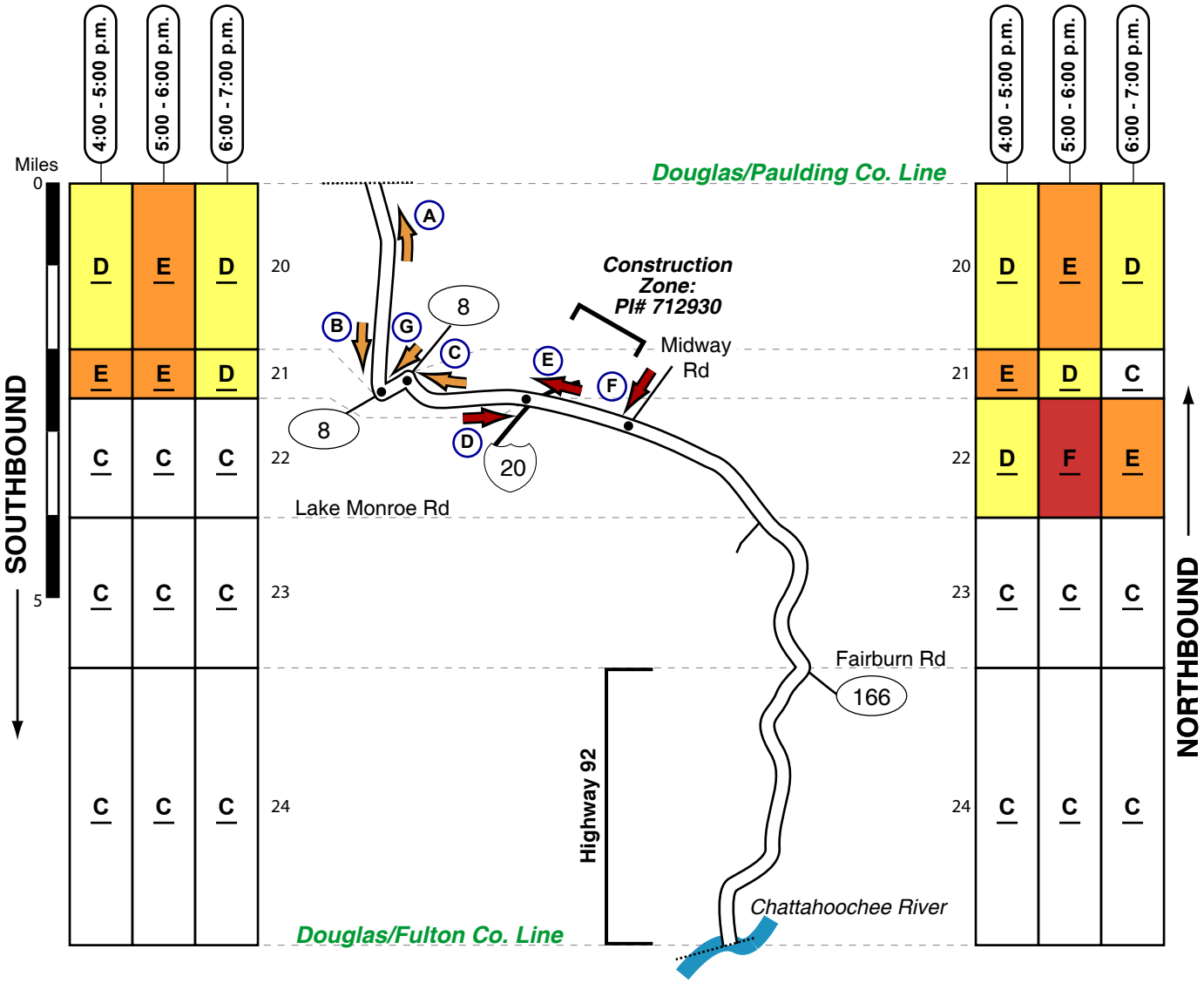
B
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: One time only
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Construction Zone
PI# 712930
Description: Interchange construction at I-20

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 92/Highway 92 (Douglas County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 92/Highway 92 (Douglas County) - Evening

A
Congestion Type: Platoons
Location: Between SR 8 & the Paulding County Line
Frequency: Peak hour
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Approaching SR 8
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue/ Platoons
Location: SR 8
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane at SR 8/SR 92.

D
Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2
Note: Congestion appeared to be exacerbated by ongoing construction at the I-20 interchange.

E
Congestion Type: Mainline Signal Queue/ Left-Turn Queue
Location: I-20 (westbound ramps)
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: During the peak hour, congestion extended back through the upstream signals at I-20 (eastbound exit ramp) and Vansant Rd. Congestion appeared to be exacerbated by ongoing construction at the I-20 interchange.

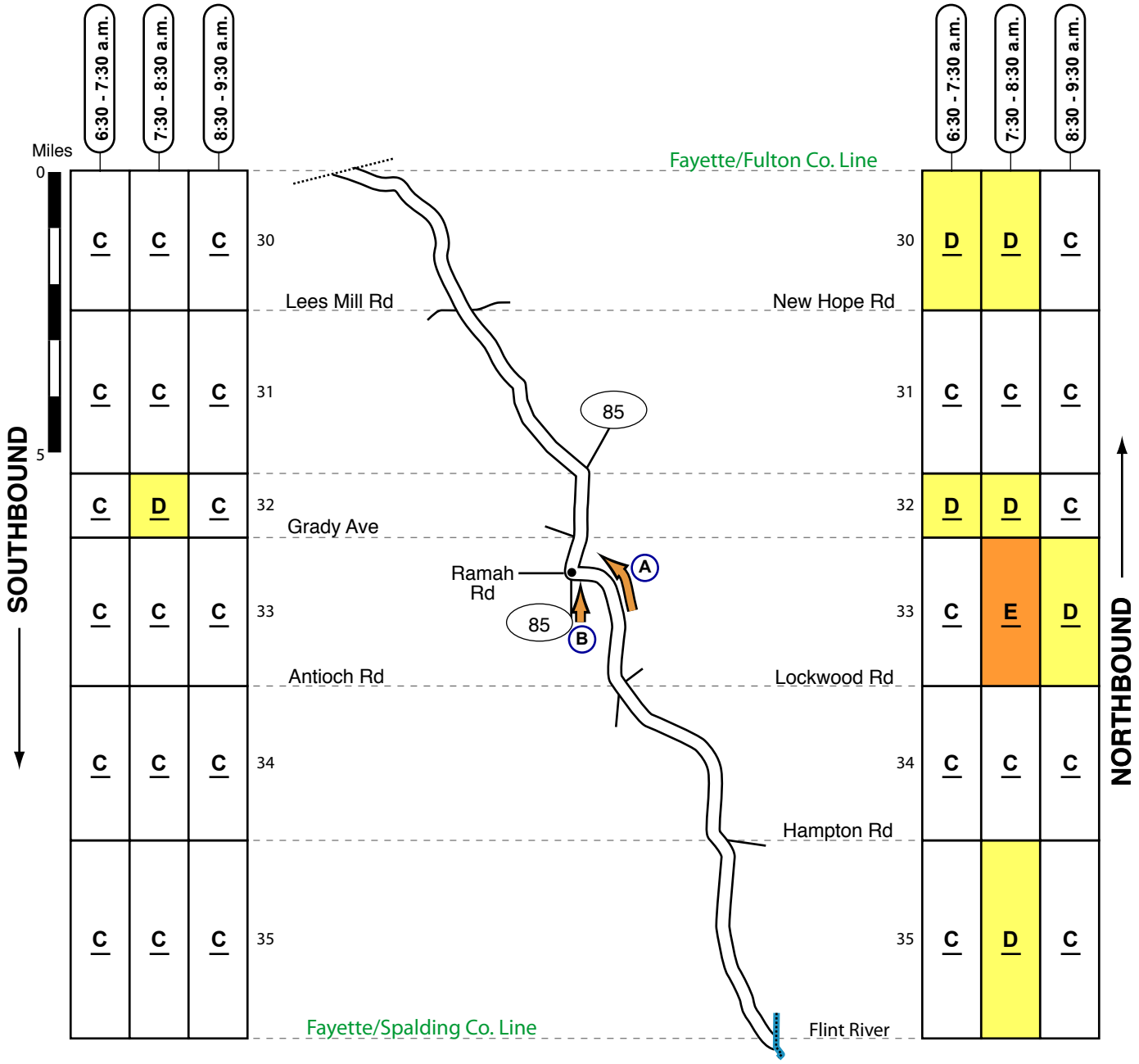
F
Congestion Type: Cross Road Signal Queue
Location: Midway Rd
Frequency: Peak hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Construction Zone
PI# 712930
Description: Interchange construction at I-20

Spring 2008

SR 92 (Fayette County) - Morning



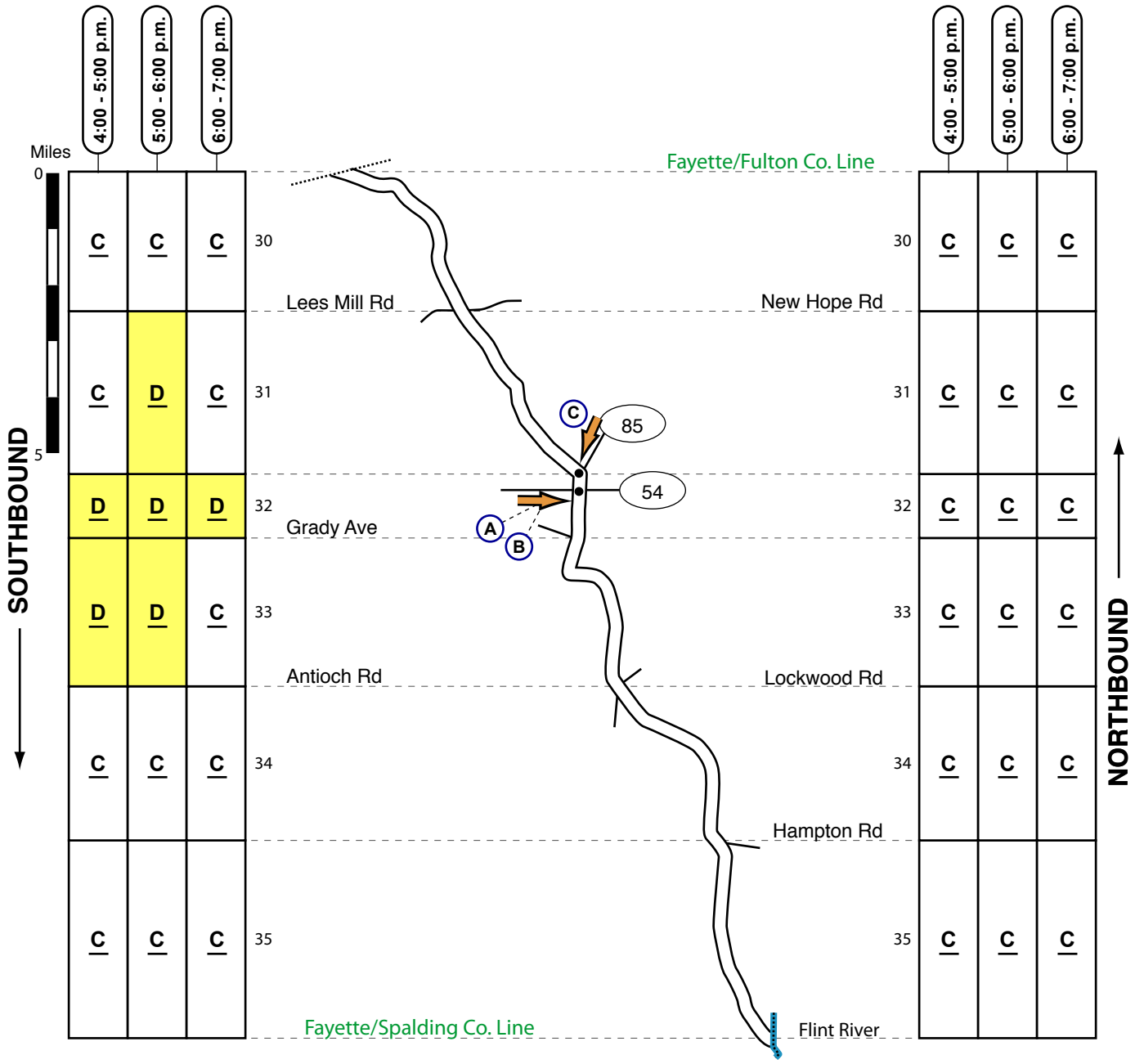
A
Congestion Type: Platoons
Location: Between Lockwood Rd & Grady Ave
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1
(per 2007 data/analysis)

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 92 (Fayette County) - Evening



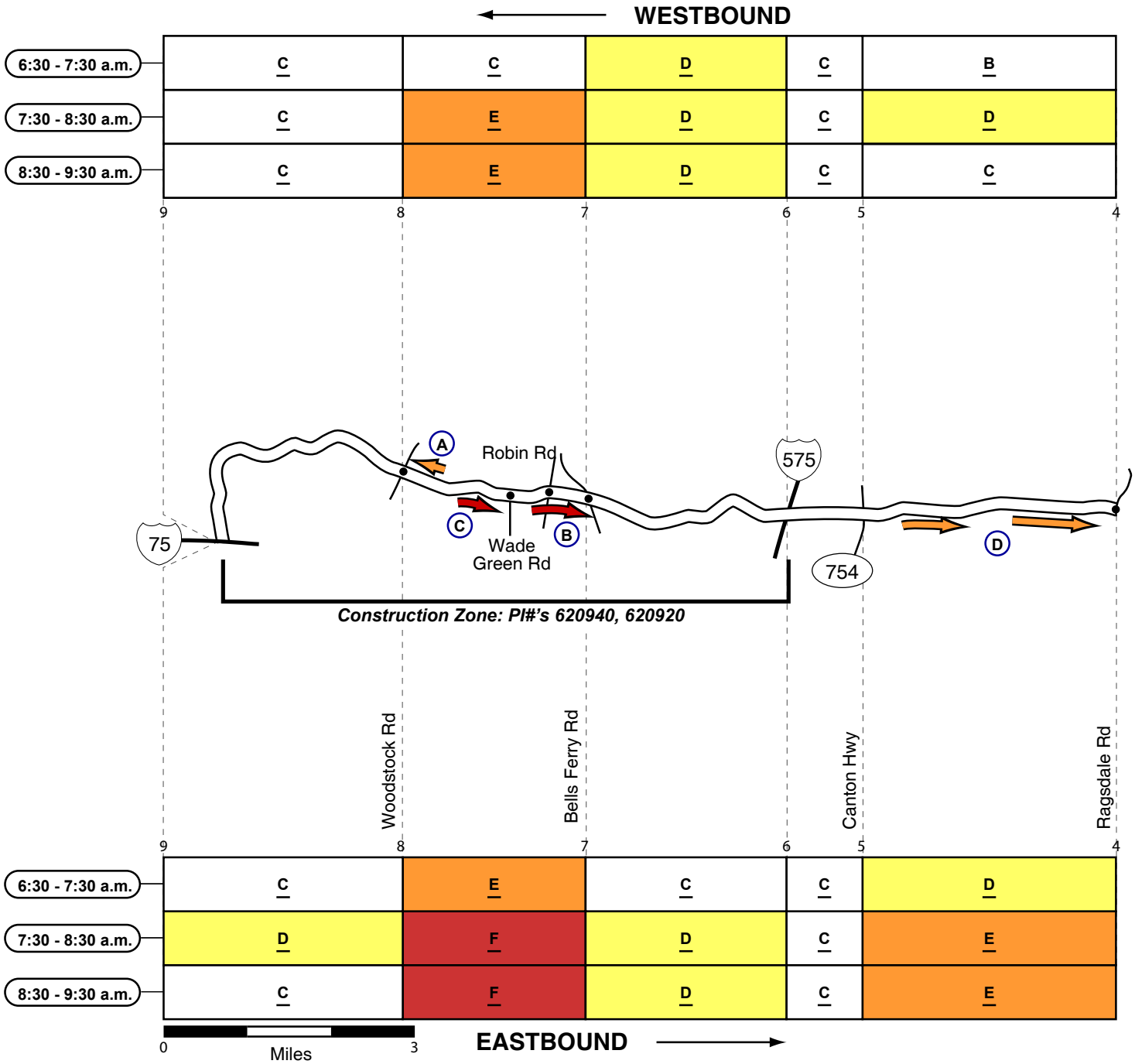
A
Congestion Type: Cross Road Signal Queue
Location: SR 54
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

B
Congestion Type: Left-Turn Queue
Location: SR 54
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

Fall 2007

SR 92 (Cherokee County) -Morning



Note: Construction (widening) along SR 92 between I-75 and I-575 appeared to exacerbate eastbound congestion in the vicinity of Bells Ferry Rd; the bottleneck at this location may have contributed to improved conditions downstream on SR 92 (relative to conditions found during the 2005 survey).

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 92 (Cherokee County) -Morning

A
Congestion Type: Signal Queue
Location: Woodstock Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Signal Queue
Location: Bells Ferry Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 40 to 80 vpl
Number of Lanes: 1
Note: Congestion approaching the signal at Bells Ferry Rd appeared to be exacerbated by construction; during some observations, congestion extended back through the upstream signal at Robin Rd.

C
Congestion Type: Signal Queue
Location: Wade Green Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 25 to 100 vpl
Number of Lanes: 1
Note: Congestion approaching the signal at Wade Green Rd may have been exacerbated by construction downstream at Bells Ferry Rd.

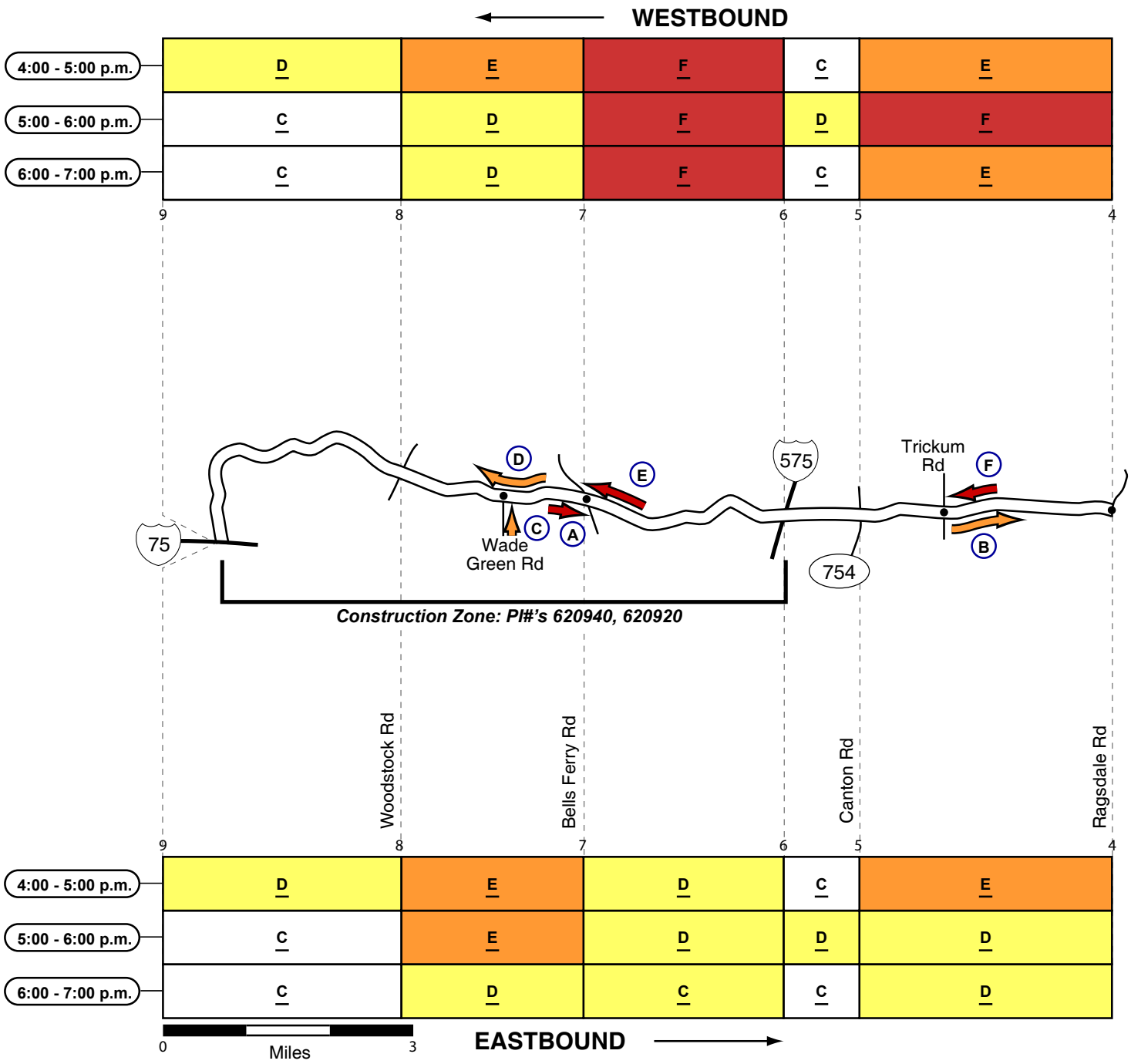
D
Congestion Type: Platoons
Location: Between Canton Hwy & Ragsdale Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 25 to 50 vpl
Number of Lanes: 2

Construction Zone
PI# 620940
Description: Roadway Widening

Construction Zone
PI# 620920
Description: Widening

Fall 2007

SR 92 (Cherokee County) -Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 92 (Cherokee County) -Evening

A
Congestion Type: Signal Queue
Location: Bells Ferry Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1
Note: Congestion approaching the signal at Bells Ferry Rd appeared to be exacerbated by construction.

B
Congestion Type: Platoons
Location: Between Canton Hwy & Ragsdale Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 25 to 35 vpl
Number of Lanes: 2

C
Congestion Type: Congested Cross Road
Location: Wade Green Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between Bells Ferry Rd & Woodstock Rd
Frequency: Intermittent
Direction: Westbound
Platoon Populations: 25 to 45 vpl
Number of Lanes: 1

E
Congestion Type: Signal Queue
Location: Bells Ferry Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 35 to 125 vpl
Number of Lanes: 1
Note: Congestion approaching the signal at Bells Ferry Rd appeared to be exacerbated by construction.

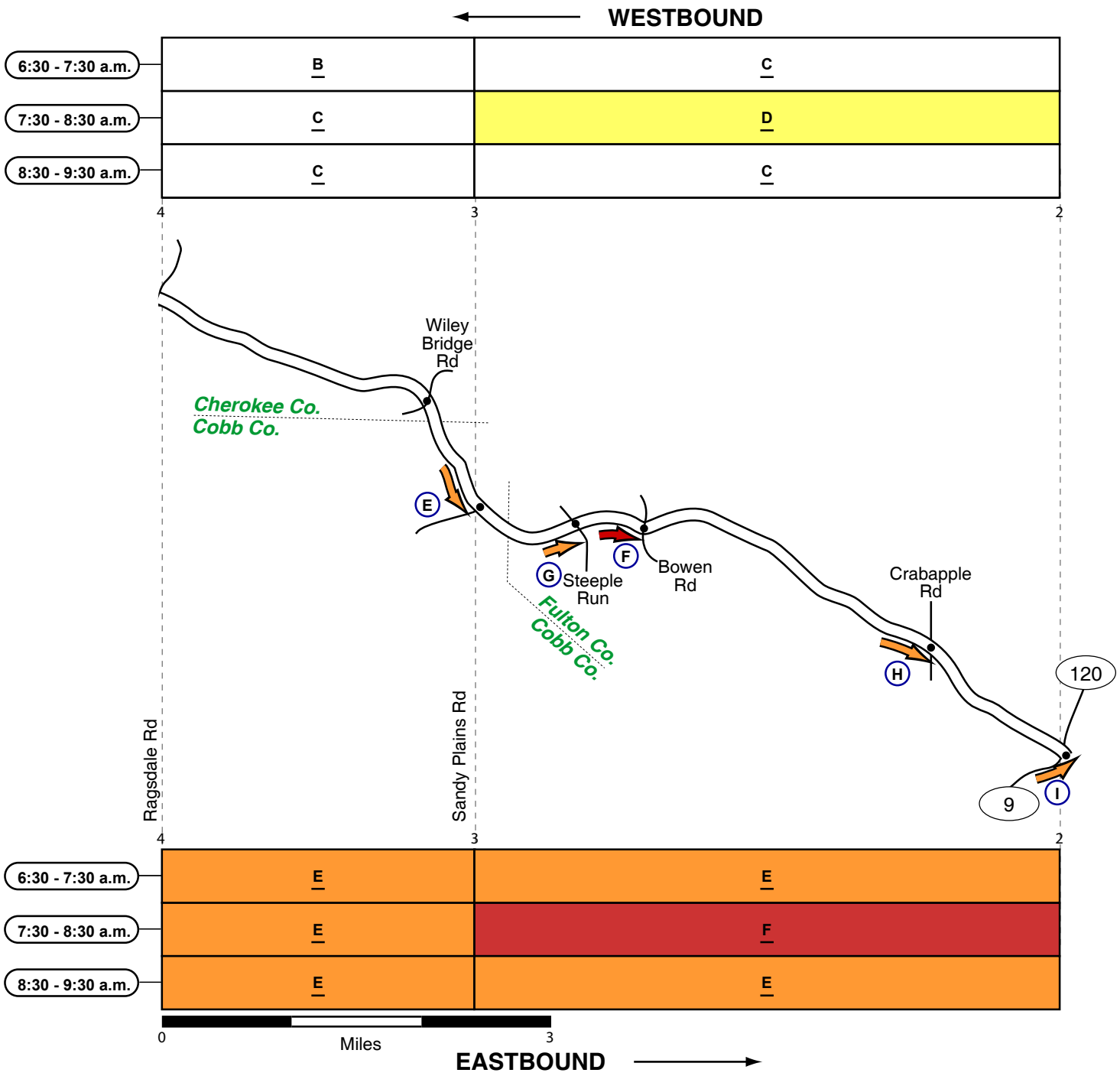
F
Congestion Type: Signal Queue
Location: Trickum Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

Construction Zone
PI# 620940
Description: Roadway Widening

Construction Zone
PI# 620920
Description: Widening

Fall 2007

SR 92 (Cherokee/Cobb & Fulton Counties) -Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 92 (Cherokee/Cobb & Fulton Counties) -Morning

E
Congestion Type: Signal Queue
Location: Sandy Plains Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 3

F
Congestion Type: Signal Queue
Location: Bowen Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 25 to 60 vpl
Number of Lanes: 3

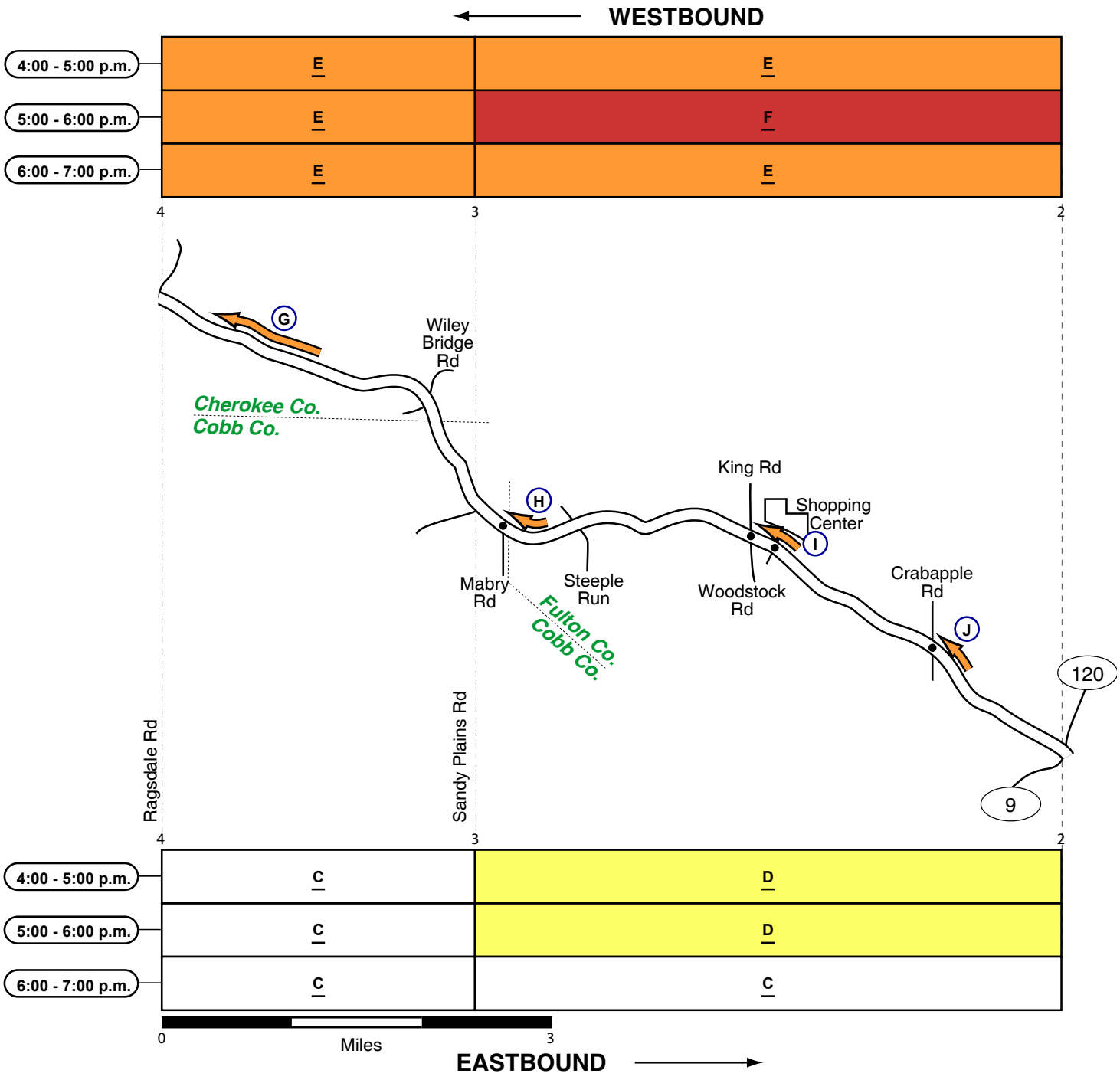
G
Congestion Type: Signal Queue
Location: Steeple Run
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 3

H
Congestion Type: Signal Queue
Location: Crabapple Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

I
Congestion Type: Congested Cross Road
Location: SR 120
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

Fall 2007

SR 92 (Cherokee/Cobb & Fulton Counties) -Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 92 (Cherokee/Cobb & Fulton Counties) -Evening

G
Congestion Type: Platoons
Location: Between Sandy Plains Rd & Ragsdale Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 25 to 35 vpl
Number of Lanes: 2

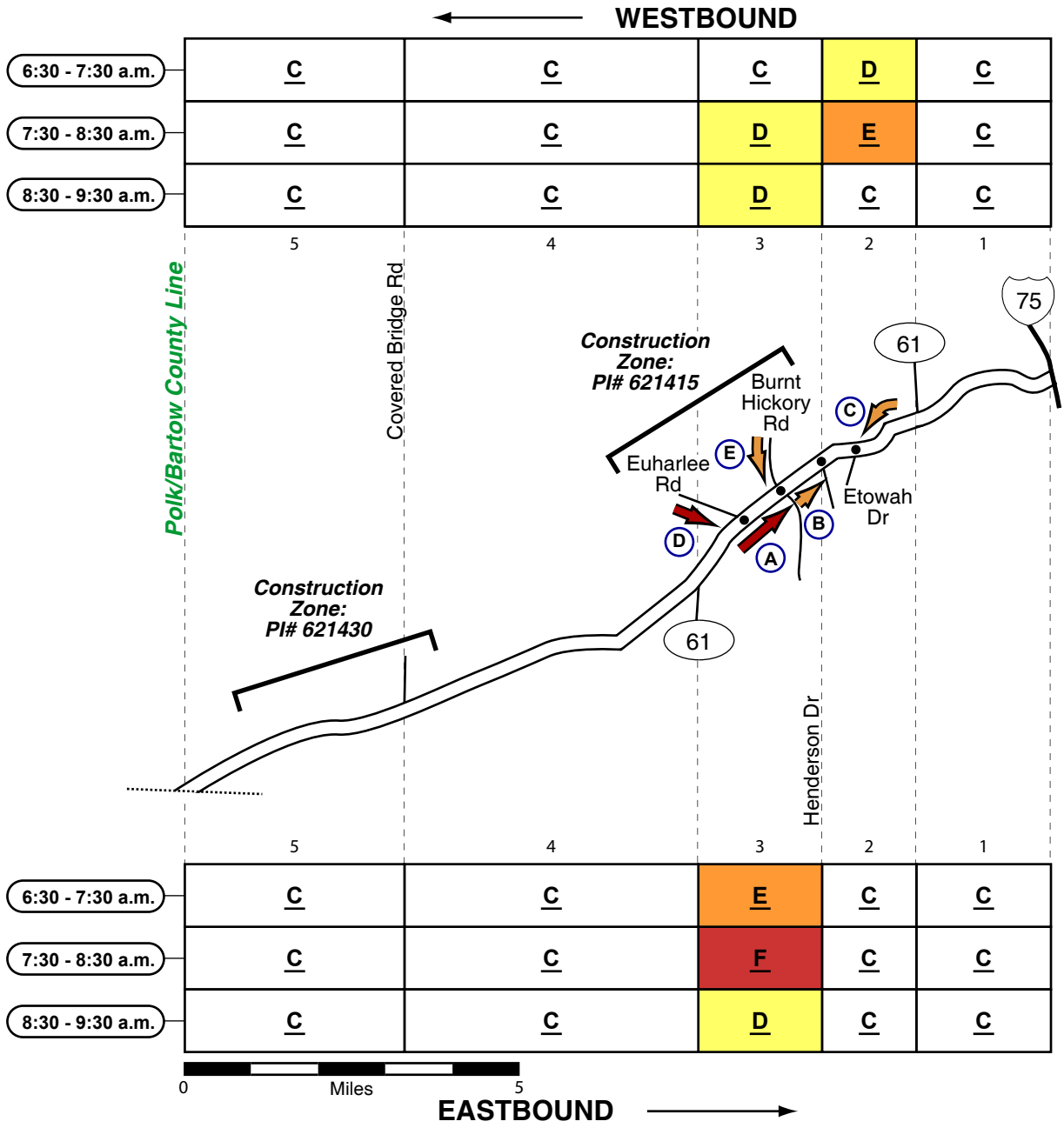
H
Congestion Type: Signal Queue
Location: Mabry Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

I
Congestion Type: Signal Queue
Location: King Rd / Woodstock Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 30 to 40 vpl
Number of Lanes: 3
Note: During some observations, congestion at King Rd extended back through the upstream signal at the shopping center.

J
Congestion Type: Signal Queue
Location: Crabapple Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

Spring 2008

SR 113 (Bartow County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 113 (Bartow County) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd & Euharlee Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 30 to 120 vpl
Number of Lanes: 1
Note: During the peak period, northbound congestion approaching Burnt Hickory Rd typically extended back through the upstream signal at Euharlee Rd. Construction (widening) along this section of SR 113 exacerbated the congestion.

B
Congestion Type: Mainline Signal Queue
Location: Henderson Dr
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 exacerbated the congestion at Henderson Dr.

C
Congestion Type: Mainline Signal Queue
Location: Etowah Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: Euharlee Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: Construction along this section of SR 113 exacerbated congestion on Euharlee Rd; during one observation at 6:50 a.m., vehicles were queued at the train crossing located just before SR 113.

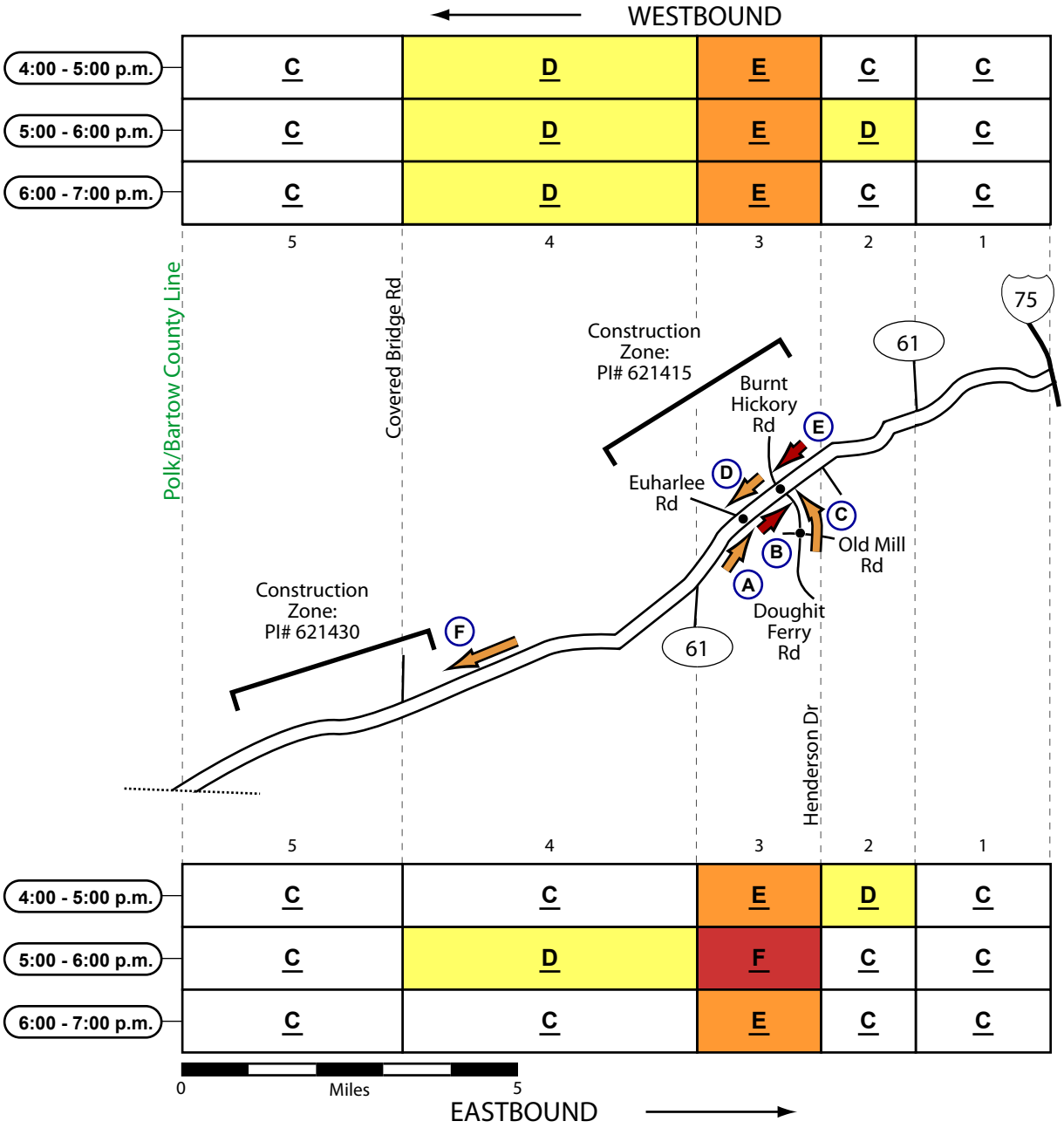
E
Congestion Type: Cross Road Signal Queue
Location: Burnt Hickory Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1
Note: Construction along this section of SR 113 exacerbated congestion on Burnt Hickory Rd; during one observation at 6:50 a.m., vehicles were queued at the train crossing located just before SR 113.

Construction Zone
PI# 621430
Description: Roadway Widening

Construction Zone
PI# 621415
Description: Roadway Widening

Spring 2008

SR 113 (Bartow County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 113 (Bartow County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Euharlee Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 exacerbated the congestion.

B
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 exacerbated the congestion.

C
Congestion Type: Cross Road Signal Queue
Location: Doughit Ferry Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, the queue typically extended back through the upstream signal at Old Mill Rd. Construction (widening) along this section of SR 113 likely exacerbated the congestion.

D
Congestion Type: Mainline Signal Queue
Location: Euharlee Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 may have exacerbated the congestion.

E
Congestion Type: Mainline Signal Queue
Location: Burnt Hickory Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 may have exacerbated the congestion.

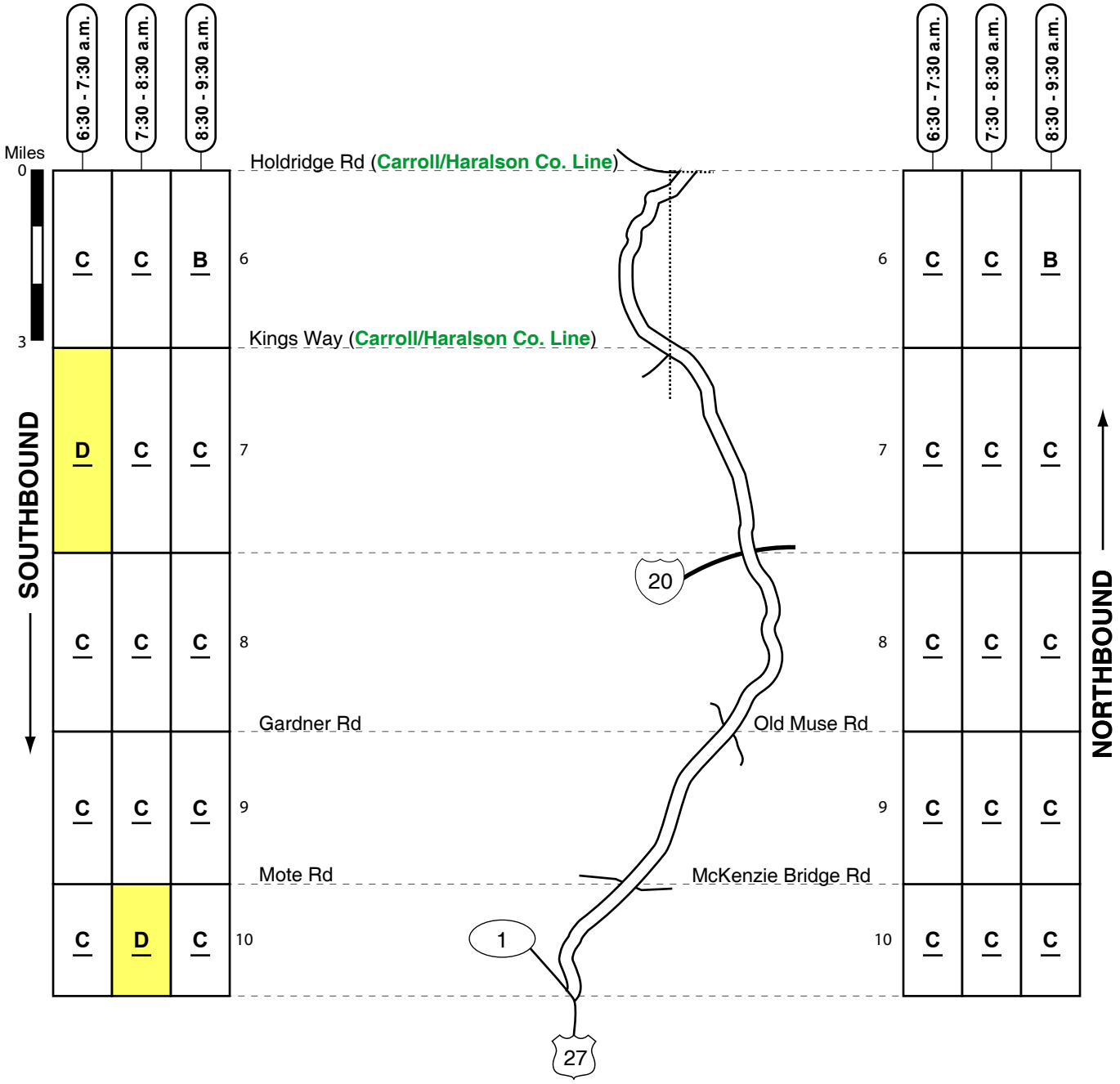
F
Congestion Type: Platoons
Location: Between SR 61 & Covered Bridge Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 50 vpl
Number of Lanes: 1
Note: Construction (widening) along this section of SR 113 may have exacerbated the congestion.

Construction Zone
PI# 621430
Description: Roadway Widening

Construction Zone
PI# 621415
Description: Roadway Widening

Spring 2008

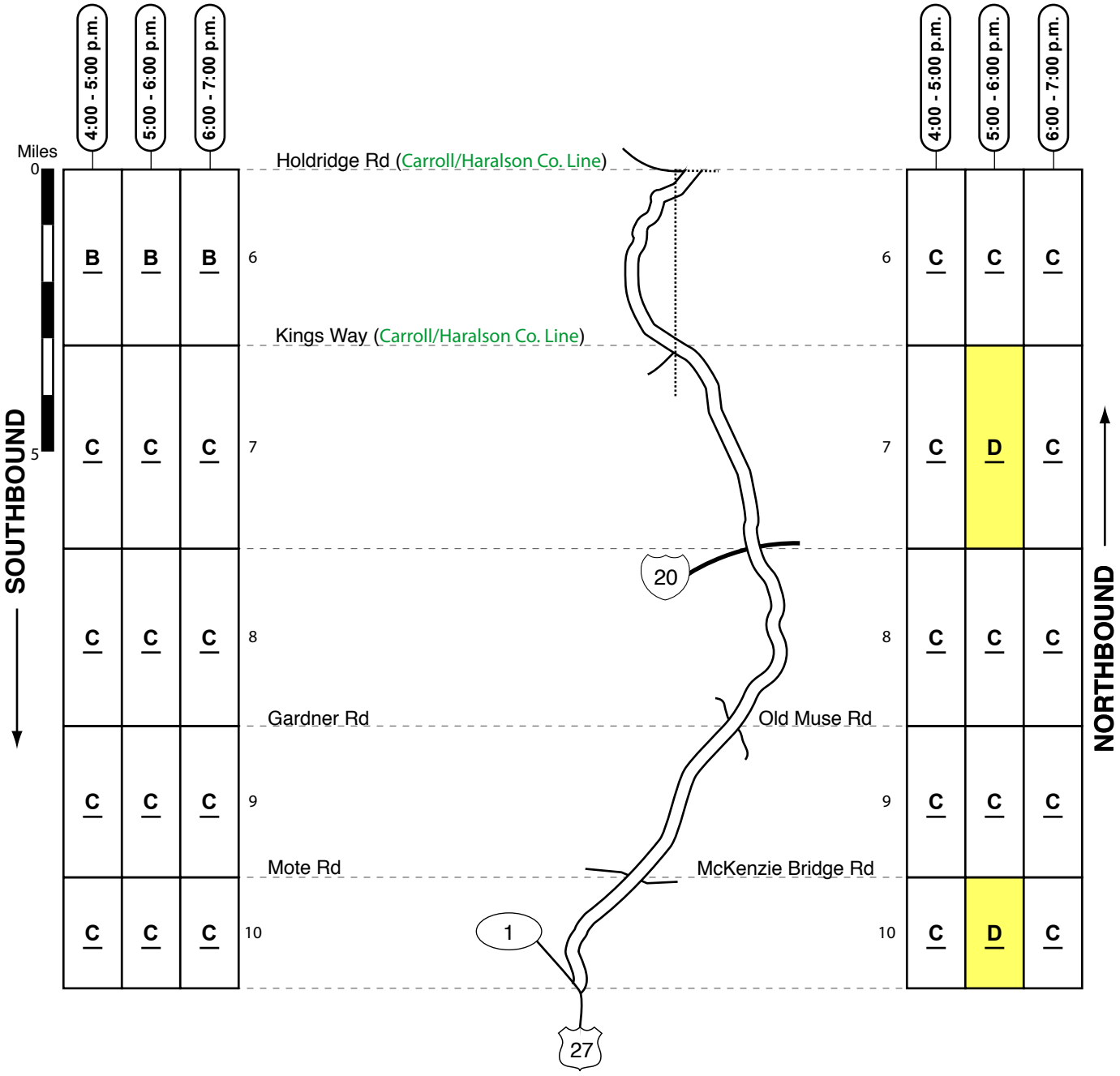
SR 113 (Carroll & Haralson Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 113 (Carroll & Haralson Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

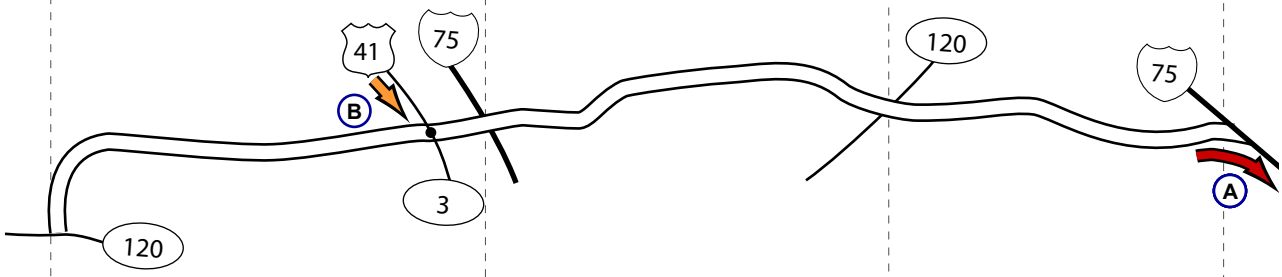
Fall 2007

120 Loop / Marietta Parkway (Cobb County) - Morning

Graphic depicted below is not the actual shape of Marietta Pkwy. See Figure 1 for actual shape.

WESTBOUND / NORTHBOUND

	4	3	2	1
6:30 - 7:30 a.m.	C	C	C	
7:30 - 8:30 a.m.	D	C	C	
8:30 - 9:30 a.m.	C	C	C	

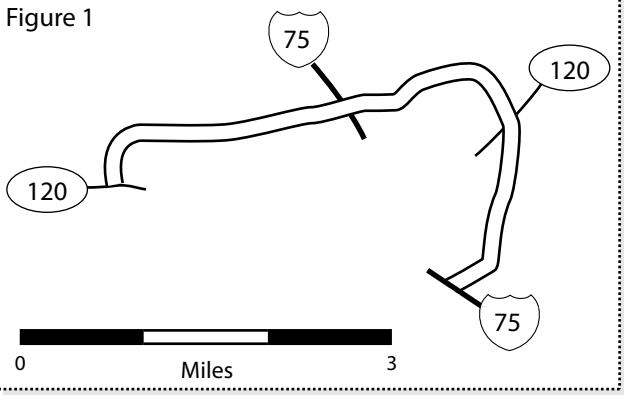


	4	3	2	1
6:30 - 7:30 a.m.	D	C	D	
7:30 - 8:30 a.m.	D	C	D	
8:30 - 9:30 a.m.	C	C	D	

0 Miles 3

EASTBOUND / SOUTHBOUND

Figure 1



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

120 Loop / Marietta Parkway (Cobb County) - Morning

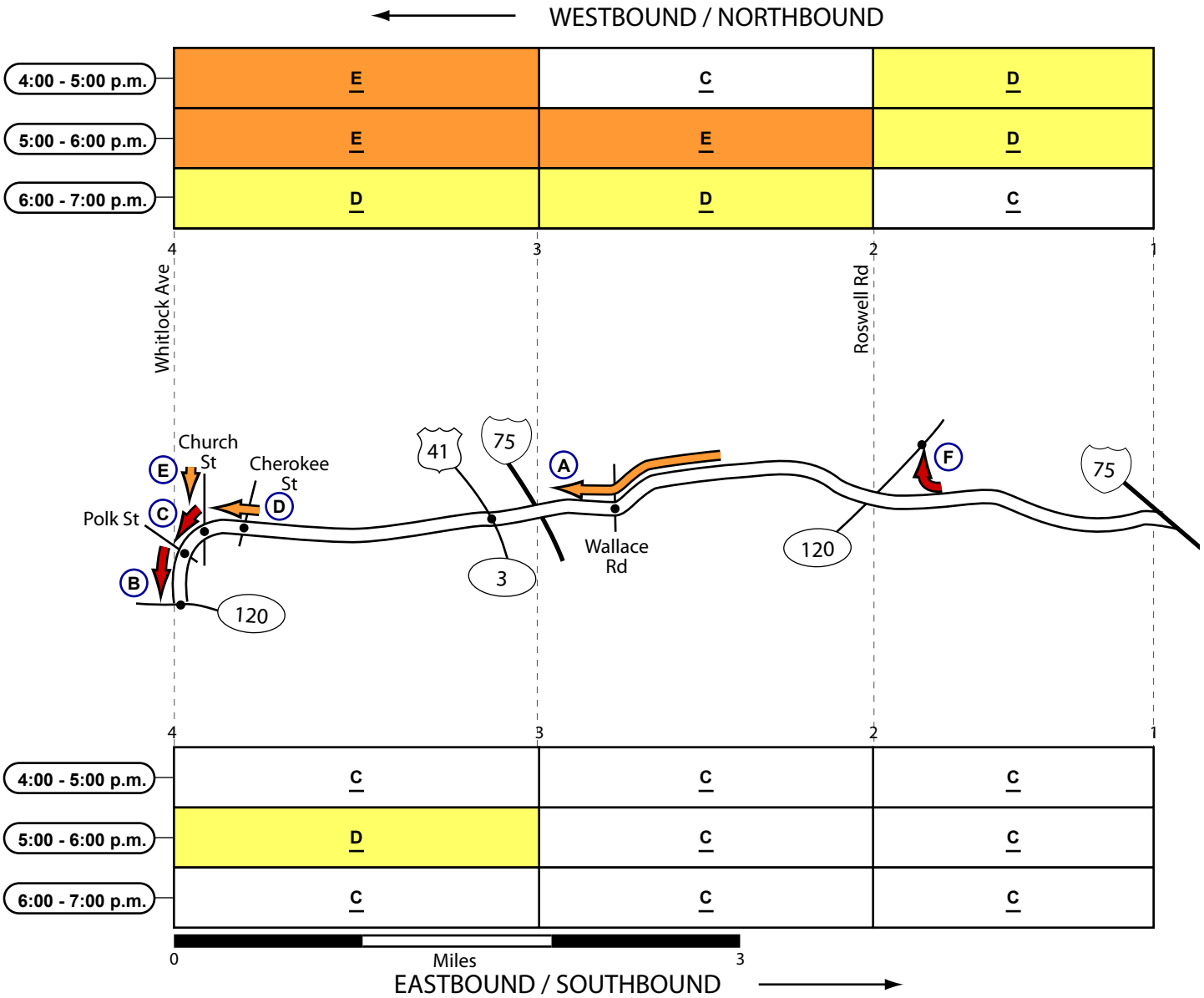
A
Congestion Type: Signal Queue
Location: I-75 (Exit 263)
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2
Note: When congested, vehicles queued in the two dedicated left-turn lanes (to southbound I-75) sometimes extended back into the the mainline of Marietta Pkwy (left two of three lanes).

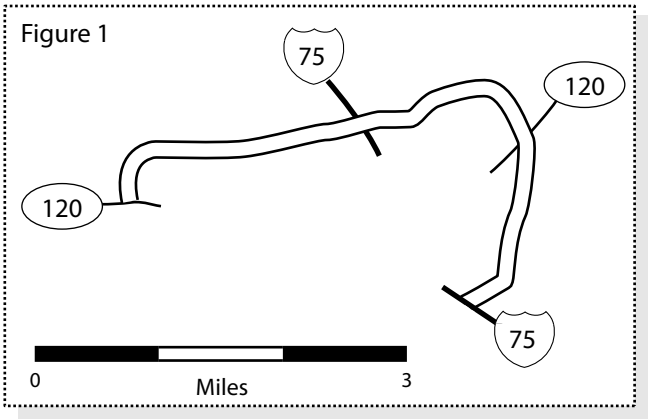
B
Congestion Type: Congested Cross Road
Location: SR 3/US 41
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

Fall 2007

120 Loop / Marietta Parkway (Cobb County) - Evening

Graphic depicted below is not the actual shape of Marietta Pkwy. See Figure 1 for actual shape.





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

120 Loop / Marietta Parkway (Cobb County) - Evening

A
Congestion Type: Platoons
Location: Between SR 120 (Roswell Rd) & I-75
Frequency: Intermittent
Direction: Westbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2
Note: During some observations, the signal at Wallace Rd appeared to generate marginal westbound congestion.

B
Congestion Type: Signal Queue
Location: SR 120 (Whitlock Ave)
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: During some observations, a mostly continuous queue was found along Marietta Pkwy between Church St and SR 120 (Whitlock Ave).

C
Congestion Type: Signal Queue
Location: Polk St
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

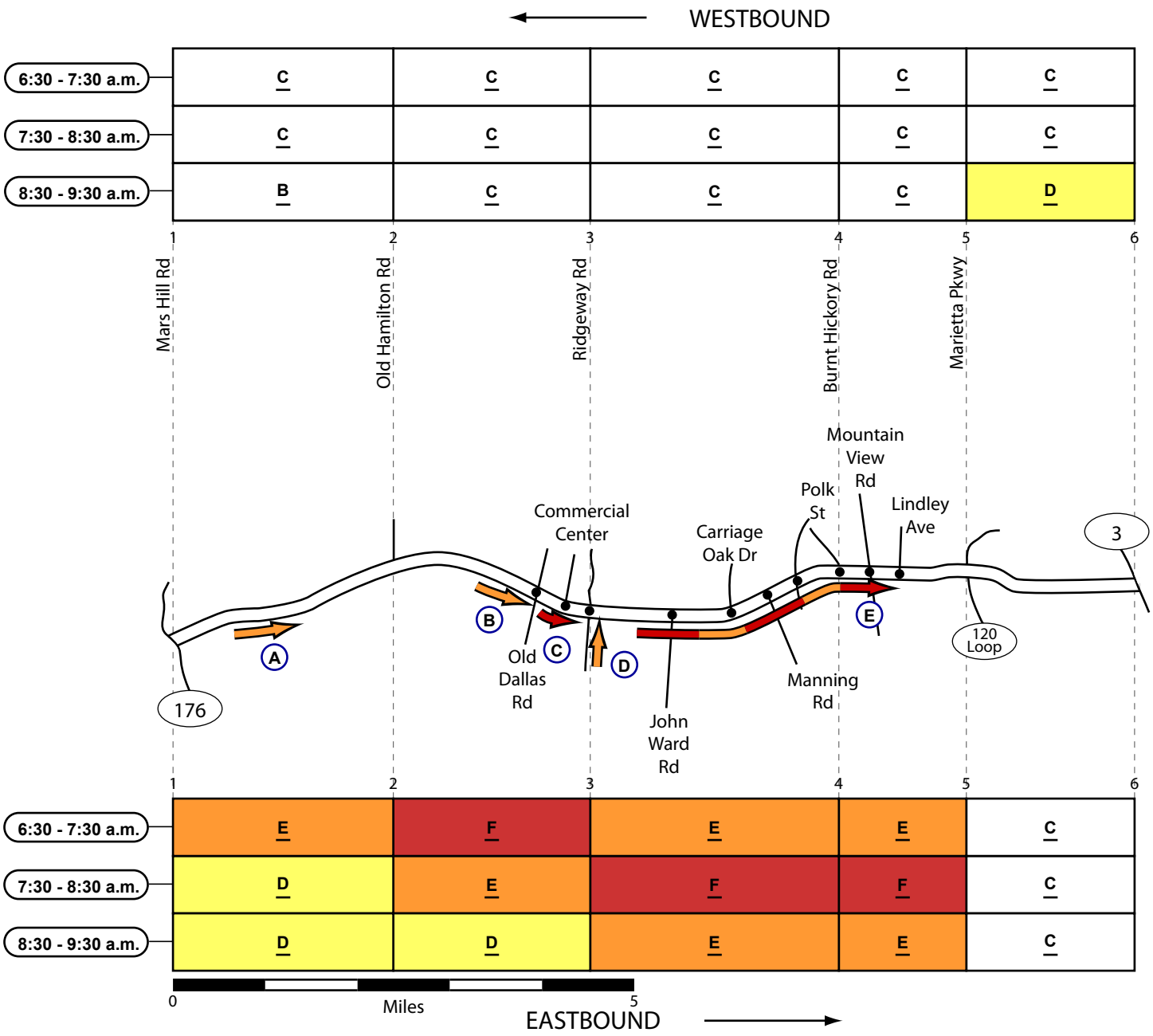
D
Congestion Type: Signal Queue
Location: Church St & Cherokee St
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Congested Cross Road
Location: Church St
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

F
Congestion Type: Exit Ramp Queue
Location: SR 120 (Roswell Rd)
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

Fall 2007

SR 120 (Cobb County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 120 (Cobb County) - Morning

A
Congestion Type: Platoons
Location: Between SR 176 & Old Hamilton Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: Old Dallas Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

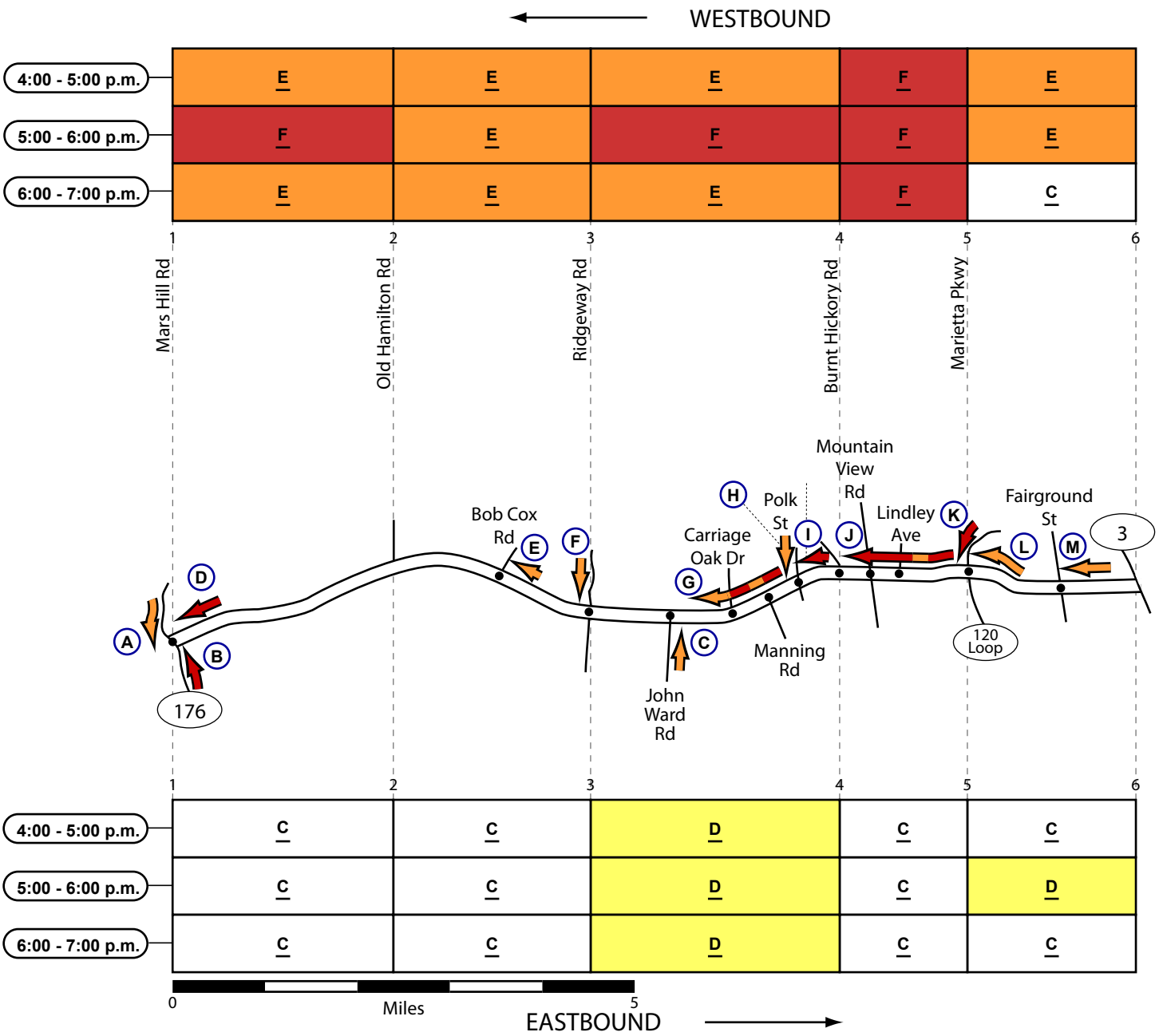
C
Congestion Type: Signal Queue
Location: Ridgeway Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2
Note: Early in the survey period (6:30-7:30 a.m.), extensive eastbound congestion was typically found on SR 120 approaching Ridgeway Rd; during one observation the head of the queue was found at the signal at Ridgeway Rd - the head of the queue during another observation was found at the closely spaced upstream signal (commercial center).

D
Congestion Type: Congested Cross Road
Location: Ridgeway Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: Lindley Ave
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 150 vpl
Number of Lanes: 1
Note: During the peak hour, congestion typically extended from John Ward Rd eastbound to Lindley Ave (a distance of approximately 2 miles); the series of signals along this section of SR 120 exacerbated the congestion.

Fall 2007

SR 120 (Cobb County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 120 (Cobb County) - Evening

A
Congestion Type: Congested Cross Road
Location: SR 176
Frequency: Intermittent
Direction: Southbound
Queue Populations: 25 to 60 vpl
Number of Lanes: 2

B
Congestion Type: Congested Cross Road
Location: SR 176
Frequency: Most observations
Direction: Northbound
Queue Populations: 25 to 65 vpl
Number of Lanes: 1

C
Congestion Type: Congested Cross Road
Location: John Ward Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Signal Queue
Location: SR 176
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 25 to 60 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: Bob Cox Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

F
Congestion Type: Congested Cross Road
Location: Ridgeway Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue/Platoons
Location: Vicinity of Manning Rd and Carriage Oak Dr
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 1
Note: After clearing the signal at Polk St, westbound travelers intermittently encountered congestion at the closely spaced signals at Manning Rd and Carriage Oak Dr.

H
Congestion Type: Congested Cross Road
Location: Polk St
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

I
Congestion Type: Signal Queue
Location: Polk St
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 1

J
Congestion Type: Signal Queue
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 30 to 60 vpl
Number of Lanes: 1
Note: During the peak period, westbound congestion approaching Burnt Hickory Rd (and the closely spaced upstream signals at Mountain View Rd and Lidley Ave) typically extended all the way back to SR 120 Loop (a distance of approximately 1.5 miles).

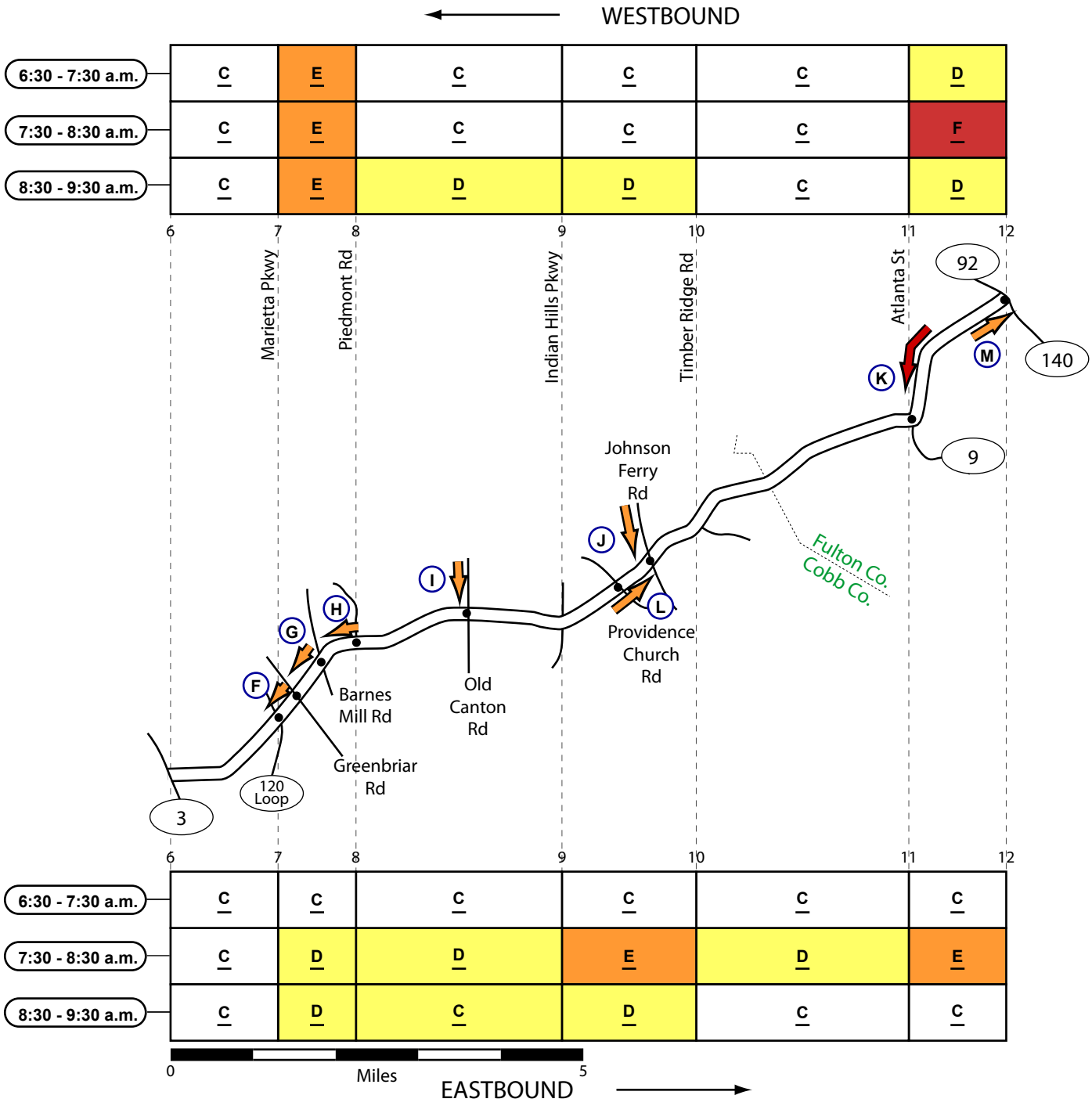
K
Congestion Type: Congested Cross Road
Location: SR 120 Loop
Frequency:Most observations
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

L
Congestion Type: Signal Queue
Location: SR 120 Loop
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

M
Congestion Type: Signal Queue
Location: Fairground St
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

Fall 2007

SR 120 (Cobb & Fulton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 120 (Cobb & Fulton Counties) - Morning

F
Congestion Type: Signal Queue
Location: Marietta Pkwy (120 Loop)
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left-turn lane to Loop 120 (southbound).

G
Congestion Type: Signal Queue
Location: Greenbriar Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Barnes Mill Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Congested Cross Road
Location: Old Canton Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

J
Congestion Type: Congested Cross Road
Location: Johnson Ferry Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

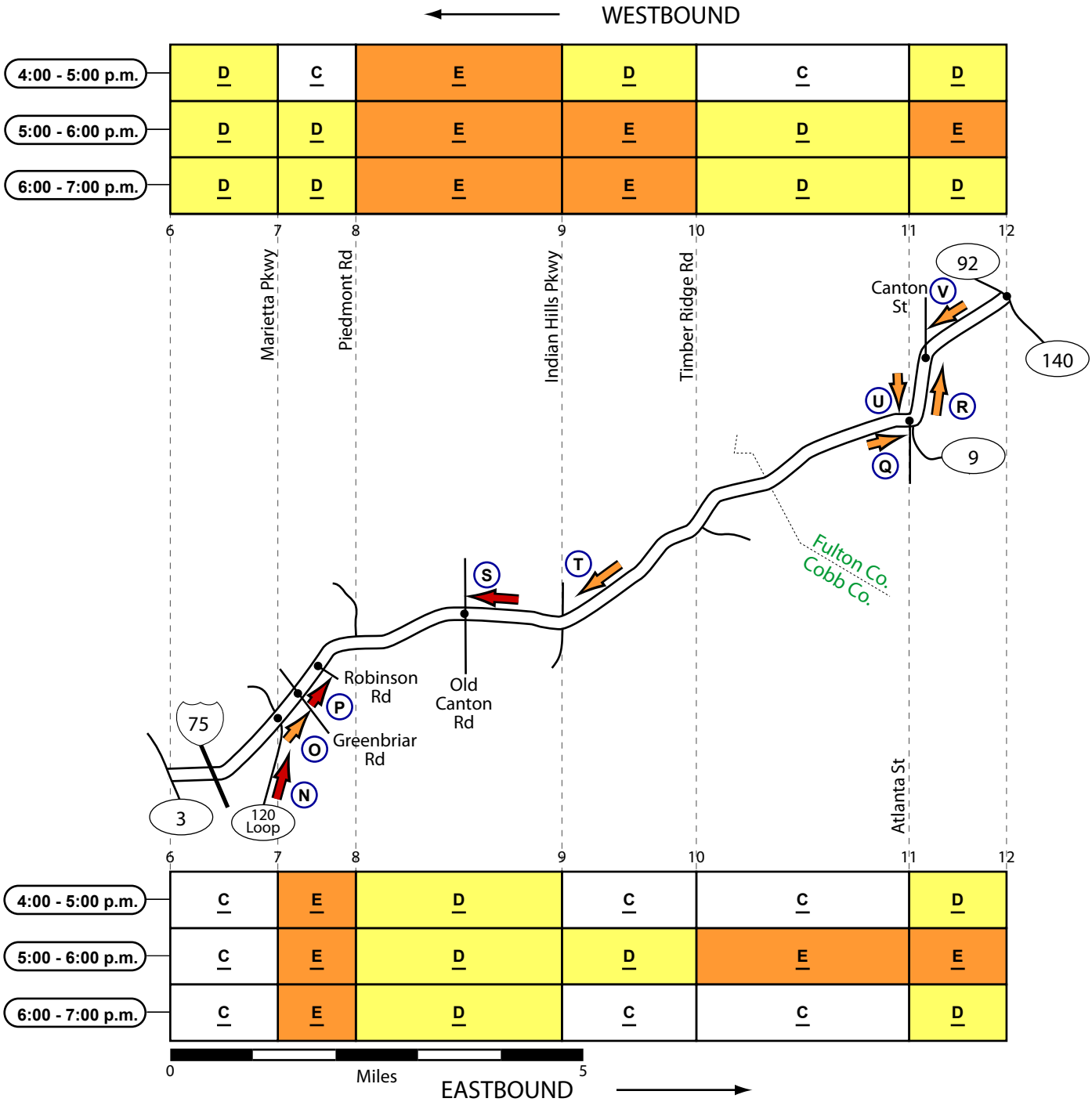
K
Congestion Type: Signal Queue
Location: Atlanta St
Frequency: Peak Hour
Direction: Westbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

L
Congestion Type: Signal Queue
Location: Johnson Ferry Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2
Note: During some observations, congestion at Johnson Ferry Rd extended back through the closely spaced signal at Providence Church Rd.

M
Congestion Type: Signal Queue
Location: SR 92/SR 140
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

Fall 2007

SR 120 (Cobb & Fulton Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 120 (Cobb & Fulton Counties) - Evening

N
Congestion Type: Congested Cross Road
Location: SR 120 Loop
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued on the ramp from SR 120 Loop to SR 120 (right two lanes to eastbound SR 120).

O
Congestion Type: Signal Queue
Location: Greenbriar Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

P
Congestion Type: Signal Queue
Location: Robinson Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

Q
Congestion Type: Signal Queue
Location: Atlanta St
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

R
Congestion Type: Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left lane approaching the signal at Canton St (left lane dedicated to northbound Canton St). Vehicles in the right lane (dedicated lane to eastbound SR 120) appeared to bypass the queue with minimal delay.

S
Congestion Type: Signal Queue
Location: Old Canton Rd
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

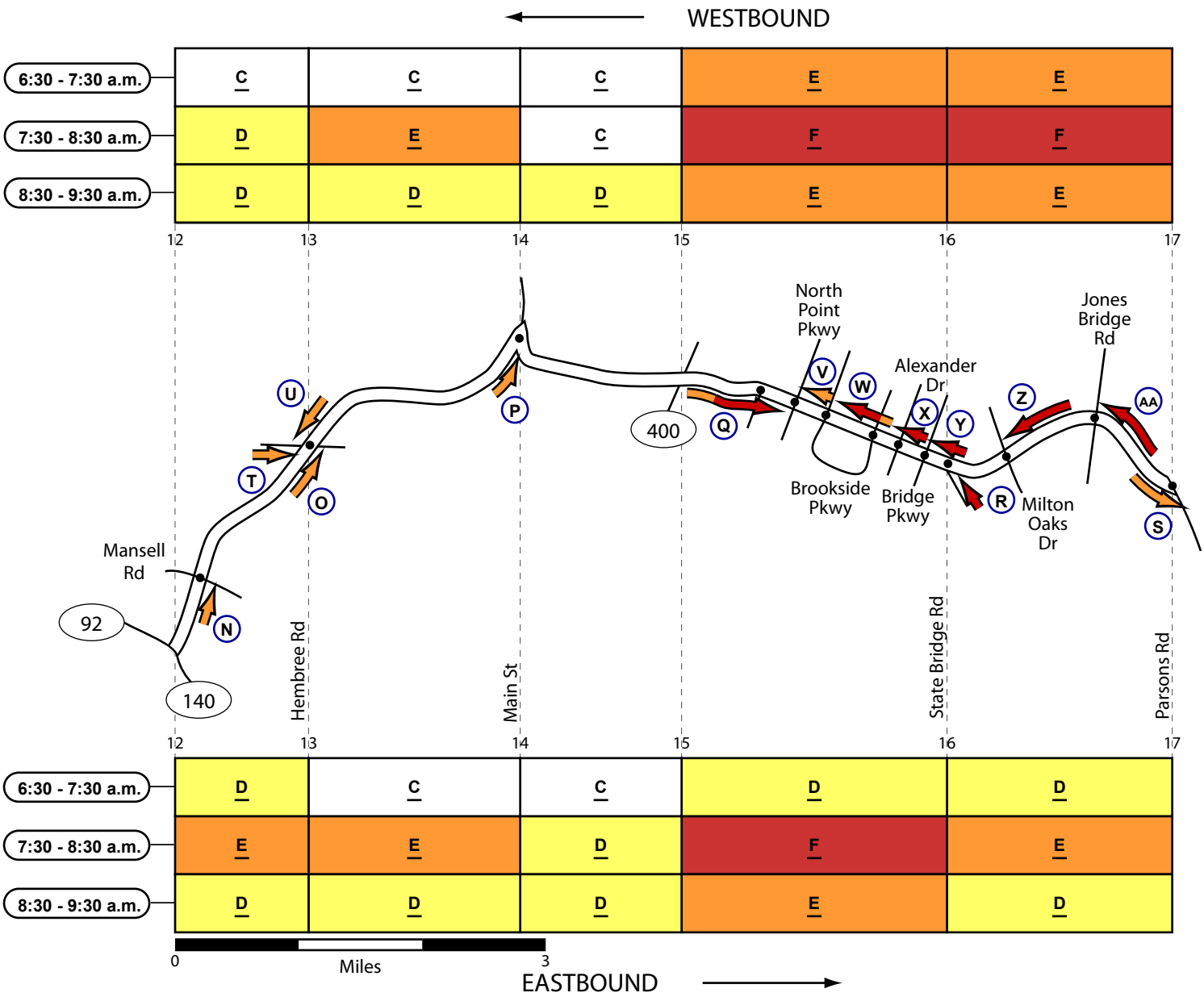
T
Congestion Type: Platoons
Location: Between Timber Ridge Rd & Indian Hills Pkwy
Frequency: Most observations peak hour
Direction: Westbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

U
Congestion Type: Signal Queue
Location: Atlanta St
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the right lane approaching the ninety-degree right turn onto Marietta Hwy (continuation of SR 120).

V
Congestion Type: Signal Queue
Location: Canton St
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

Fall 2007

SR 120 (Fulton County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 120 (Fulton County) - Morning

N
Congestion Type: Signal Queue
Location: Mansell Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

O
Congestion Type: Signal Queue
Location: Hembree Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

P
Congestion Type: Signal Queue
Location: Main St
Frequency: Peak Hour
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

Q
Congestion Type: Signal Queue
Location: North Point Pkwy
Frequency: Most observations
Direction: Eastbound
Queue Populations: 30 to 90 vpl
Number of Lanes: 2
Note: During most observations, eastbound congestion at North Point Pkwy extended back through the closely spaced intersection at the entrance to a commercial building/parking lot. Congestion also intermittently extended back to the SR 400 Interchange.

R
Congestion Type: Congested Cross Road
Location: State Bridge Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 30 to 50 vpl
Number of Lanes: 2

S
Congestion Type: Signal Queue
Location: Parsons Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1
Note: Eastbound congestion found on SR 120 at Parsons Rd may have been exacerbated by construction at this intersection.

T
Congestion Type: Congested Cross Road
Location: Hembree Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

U
Congestion Type: Signal Queue
Location: Hembree Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

V
Congestion Type: Signal Queue
Location: North Point Pkwy
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

W
Congestion Type: Signal Queue
Location: Brookside Pkwy/Cotton Creek Entry
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

X
Congestion Type: Signal Queue
Location: Alexander Dr
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 25 to 45 vpl
Number of Lanes: 2

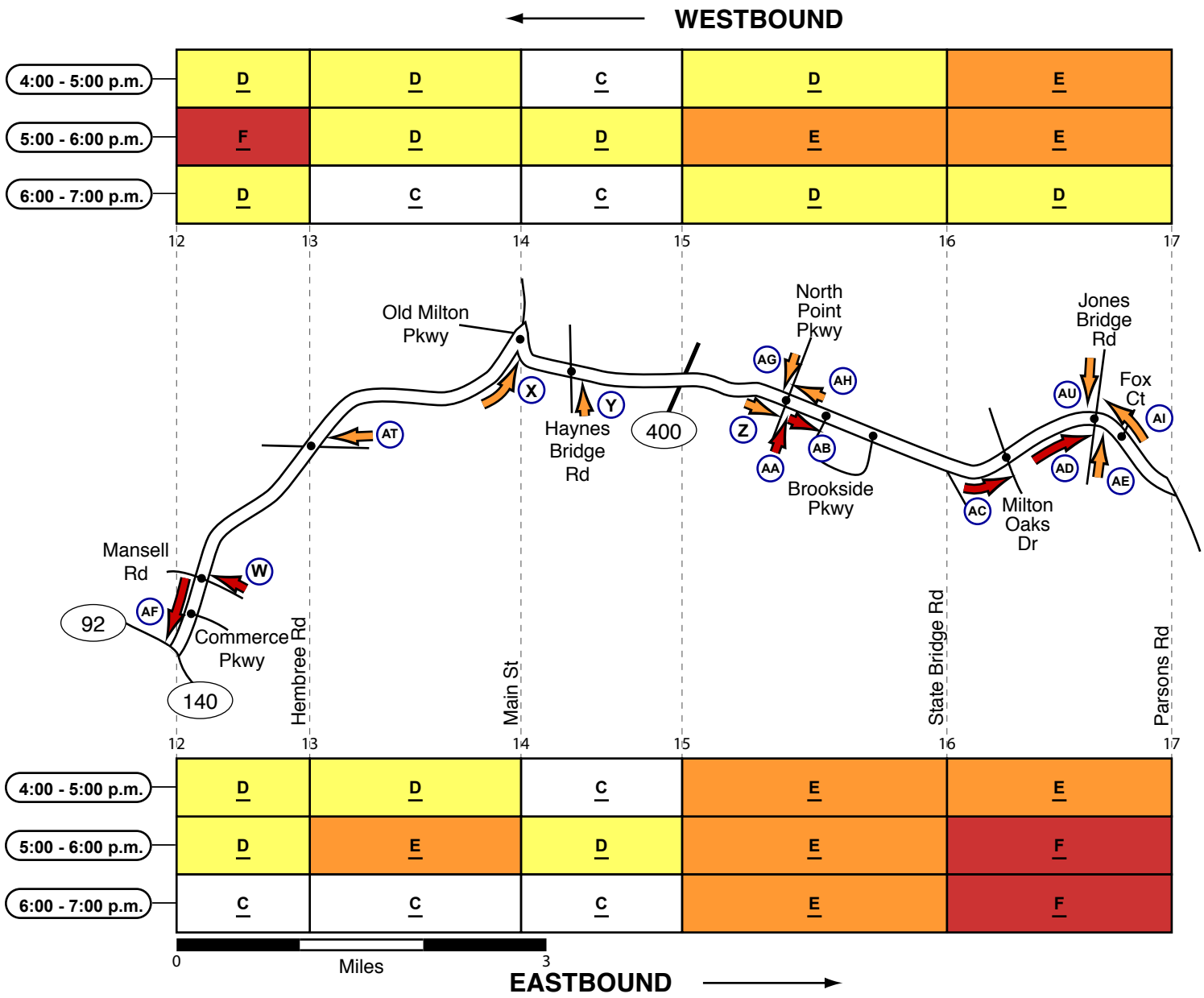
Y
Congestion Type: Signal Queue
Location: Bridge Pkwy
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

Z
Congestion Type: Signal Queue
Location: Milton Oaks Dr
Frequency: Most observations before 8:30 a.m.
Direction: Westbound
Queue Populations: 30 to 65 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically extended back to the signal at Jones Bridge Rd.

AA
Congestion Type: Signal Queue
Location: Jones Bridge Rd
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 30 to 90 vpl
Number of Lanes: 1
Note: On two of the four morning surveys, westbound congestion approaching Jones Bridge Rd extended all the way back to the signal at Parsons Rd (a distance of approximately one mile).

Fall 2007

SR 120 (Fulton County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 120 (Fulton County) - Evening

W
Congestion Type: Congested Cross Road
Location: Mansell Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 55 vpl
Number of Lanes: 2

X
Congestion Type: Signal Queue
Location: Main St/Old Milton Pkwy
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

Y
Congestion Type: Congested Cross Road
Location: Haynes Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles queued in the left turn bay typically extended back into the left lane (of three) on Haynes Bridge Rd.

Z
Congestion Type: Signal Queue
Location: North Point Pkwy
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 35 to 50 vpl
Number of Lanes: 2

AA
Congestion Type: Congested Cross Road
Location: North Point Pkwy
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 55 vpl
Number of Lanes: 2

AB
Congestion Type: Signal Queue
Location: Brookside Pkwy
Frequency: Most observations peak hour
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

AC
Congestion Type: Signal Queue
Location: Milton Oaks Dr
Frequency: Most observations
Direction: Eastbound
Queue Populations: 25 to 70 vpl
Number of Lanes: 1

AD
Congestion Type: Signal Queue
Location: Jones Bridge Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 25 to 70 vpl
Number of Lanes: 1

AE
Congestion Type: Congested Cross Road
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

AF
Congestion Type: Signal Queue
Location: SR 92 / SR 140
Frequency: Most observations
Direction: Southbound
Queue Populations: 30 to 50 vpl
Number of Lanes: 2
Note: During some observations, southbound congestion approaching SR 92/140 extended back through the upstream signal at Commerce Pkwy; on one day only (one observation), southbound congestion was also found at the upstream signals at Mansell Rd and Houze Way.

AG
Congestion Type: Congested Cross Road
Location: North Point Pkwy
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles queued in the left turn bay typically extended back into the left lane (of two) on North Point Pkwy.

AH
Congestion Type: Signal Queue
Location: North Point Pkwy
Frequency: Intermittent
Direction: Westbound
Queue Populations: 30 to 40 vpl
Number of Lanes: 2

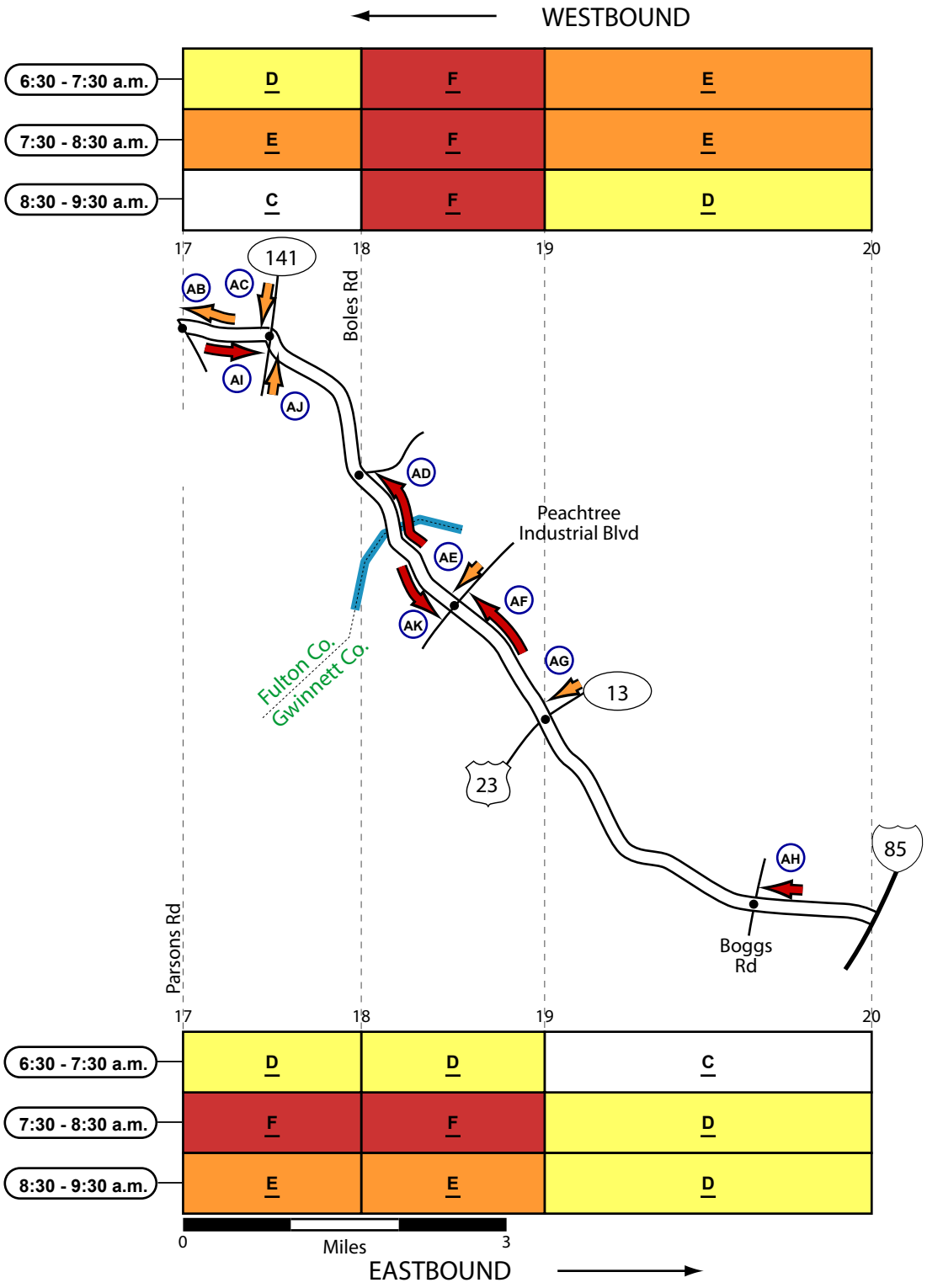
AI
Congestion Type: Signal Queue
Location: Jones Bridge Rd/Fox Ct
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1
Note: School buses in the traffic stream may have contributed to the congestion.

AT
Congestion Type: Congested Cross Road
Location: Hembree Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left lane of two waiting to turn southbound on SR 120.

AU
Congestion Type: Congested Cross Road
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

Fall 2007

SR 120 (Fulton & Gwinnett Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 120 (Fulton & Gwinnett Counties) - Morning

AB
Congestion Type: Signal Queue
Location: Parsons Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1
Note: Westbound congestion on SR 120 at Parsons Rd may have been exacerbated by construction at this intersection.

AC
Congestion Type: Congested Cross Road
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

AD
Congestion Type: Signal Queue
Location: Boles Rd
Frequency: Most observations before 8:30 a.m.
Direction: Westbound
Queue Populations: 40 to 80 vpl
Number of Lanes: 1

AE
Congestion Type: Congested Cross Road
Location: Peachtree Industrial Blvd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

AF
Congestion Type: Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most observations
Direction: Westbound
Queue Populations: 30 to 105 vpl
Number of Lanes: 1

AG
Congestion Type: Congested Cross Road
Location: SR 13
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

AH
Congestion Type: Signal Queue
Location: Boggs Rd
Frequency: Most observations peak hour
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

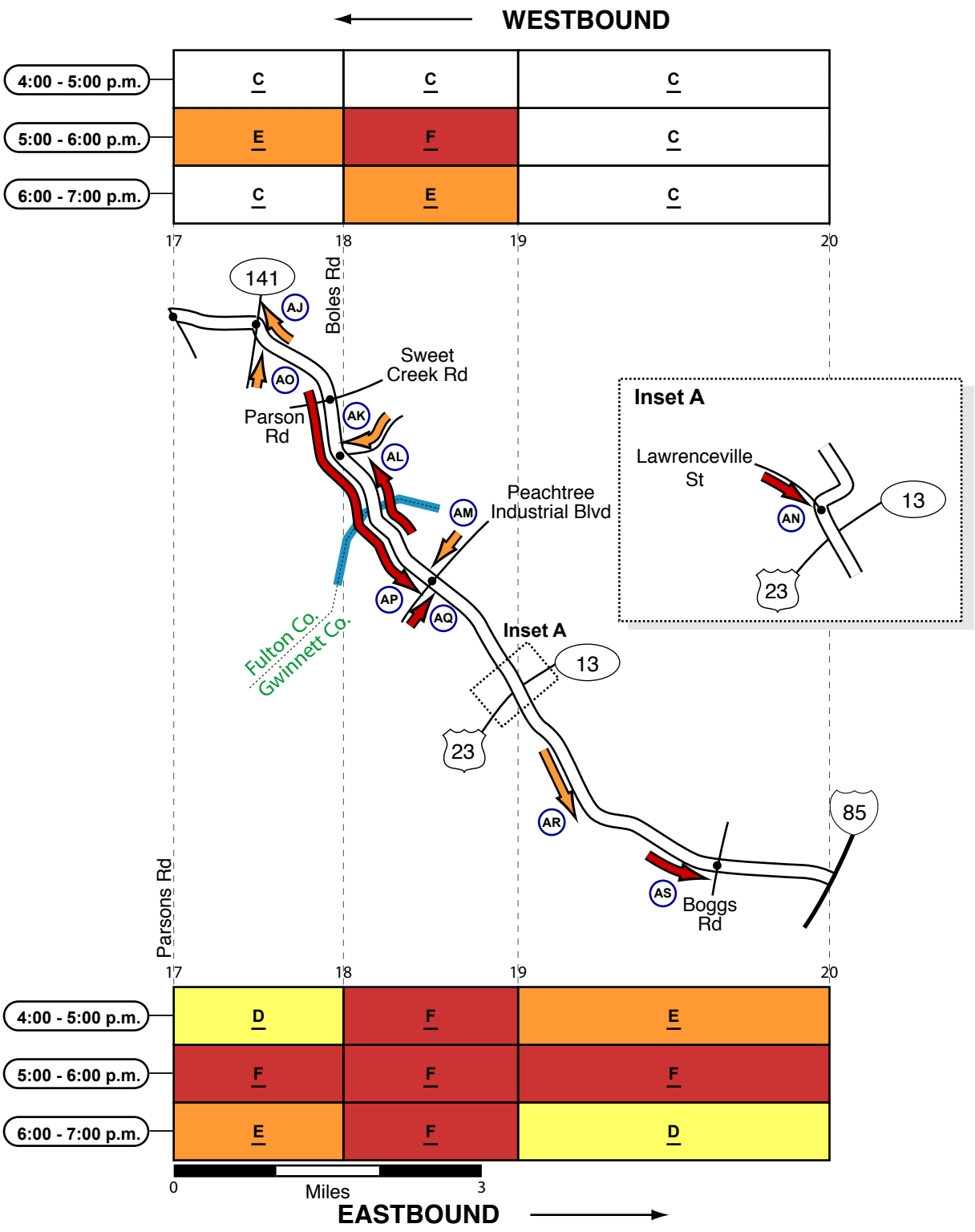
AI
Congestion Type: Signal Queue
Location: SR 141
Frequency: Most observations
Direction: Eastbound
Queue Populations: 35 to 45 vpl
Number of Lanes: 1

AJ
Congestion Type: Congested Cross Road
Location: SR 141
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

AK
Congestion Type: Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 40 to 70 vpl
Number of Lanes: 1

Fall 2007

SR 120 (Fulton & Gwinnett Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 120 (Fulton & Gwinnett Counties) - Evening

AJ
Congestion Type: Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

AK
Congestion Type: Congested Cross Road
Location: Boles Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

AL
Congestion Type: Signal Queue
Location: Boles Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 50 to 120 vpl
Number of Lanes: 1
Note: During two of the four evening survey dates (peak hour), extensive westbound congestion was found on SR 120 crossing the Chattahoochee River approaching the signal at Boles Rd; congestion was not found here during the other two evening survey dates.

AM
Congestion Type: Congested Cross Road
Location: Peachtree Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

AN
Congestion Type: Congested Cross Road
Location: Lawrenceville St
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 1

AO
Congestion Type: Congested Cross Road
Location: SR 141
Frequency: Intermittent
Direction: Northbound
Queue Populations: 40 to 50 vpl
Number of Lanes: 2

AP
Congestion Type: Signal Queue
Location: Peachtree Industrial Blvd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 75 to 120 vpl
Number of Lanes: 1
Note: During most observations, eastbound congestion approaching the signal at Peachtree Industrial Blvd extended back across the Chattahoochee River and through the upstream signals at Boles Rd and Parsons Rd (a distance of over one mile).

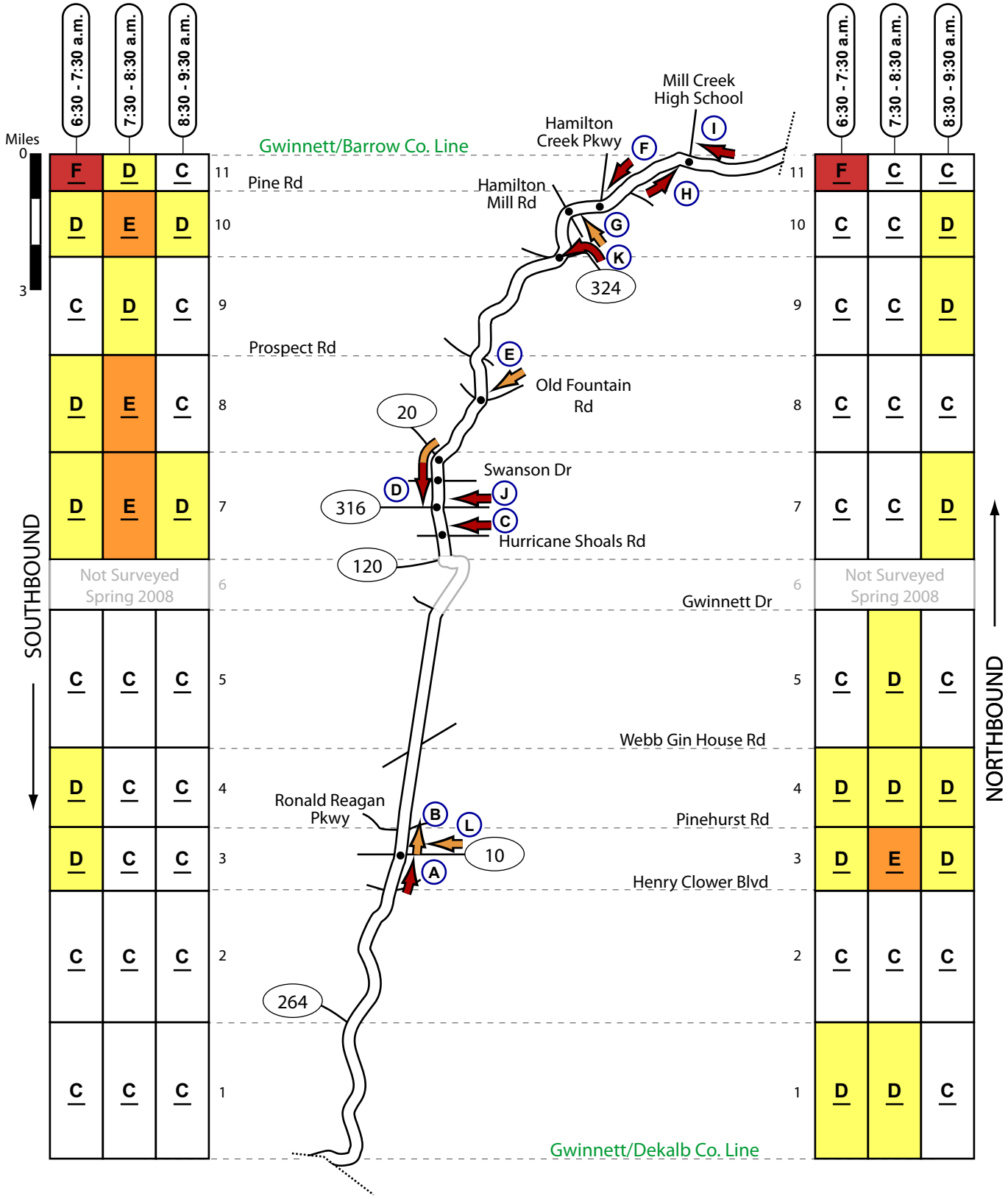
AQ
Congestion Type: Congested Cross Road
Location: Peachtree Industrial Blvd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

AR
Congestion Type: Platoons
Location: Between SR 13 and Boggs Rd
Frequency: Most observations
Direction: Eastbound
Platoon Populations: 25 to 40 vpl
Number of Lanes: 1

AS
Congestion Type: Signal Queue
Location: Boggs Rd
Frequency: Most observations peak hour
Direction: Eastbound
Queue Populations: 20 to 65 vpl
Number of Lanes: 1

Spring 2008

SR 124 (Gwinnett County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 124 (Gwinnett County) - Morning

A
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Platoons
Location: Between SR 10 & Ronald Reagan Parkway
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: Hurricane Shoals Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations between 7:00 & 8:00 a.m.
Direction: Southbound
Queue Population: 25 to 75 vpl
Number of Lanes: 2
Note: During one observation, congestion backed through the upstream signals at Swanson Dr and the SR 20/SR 124 intersection

E
Congestion Type: Cross Road Signal Queue
Location: Old Fountain Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane.

F
Congestion Type: Mainline Signal Queue
Location: Hamilton Creek Parkway
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: Hamilton Mill Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Signal Queue
Location: Mill Creek High School
Frequency: Most observations before 7:00 a.m.
Direction: Northbound
Queue Population: 80 to 90 vpl
Number of Lanes: 1

I
Congestion Type: Mainline Signal Queue
Location: Mill Creek High School
Frequency: Most observations before 7:00 a.m.
Direction: Southbound
Queue Population: 50 to 60 vpl
Number of Lanes: 1

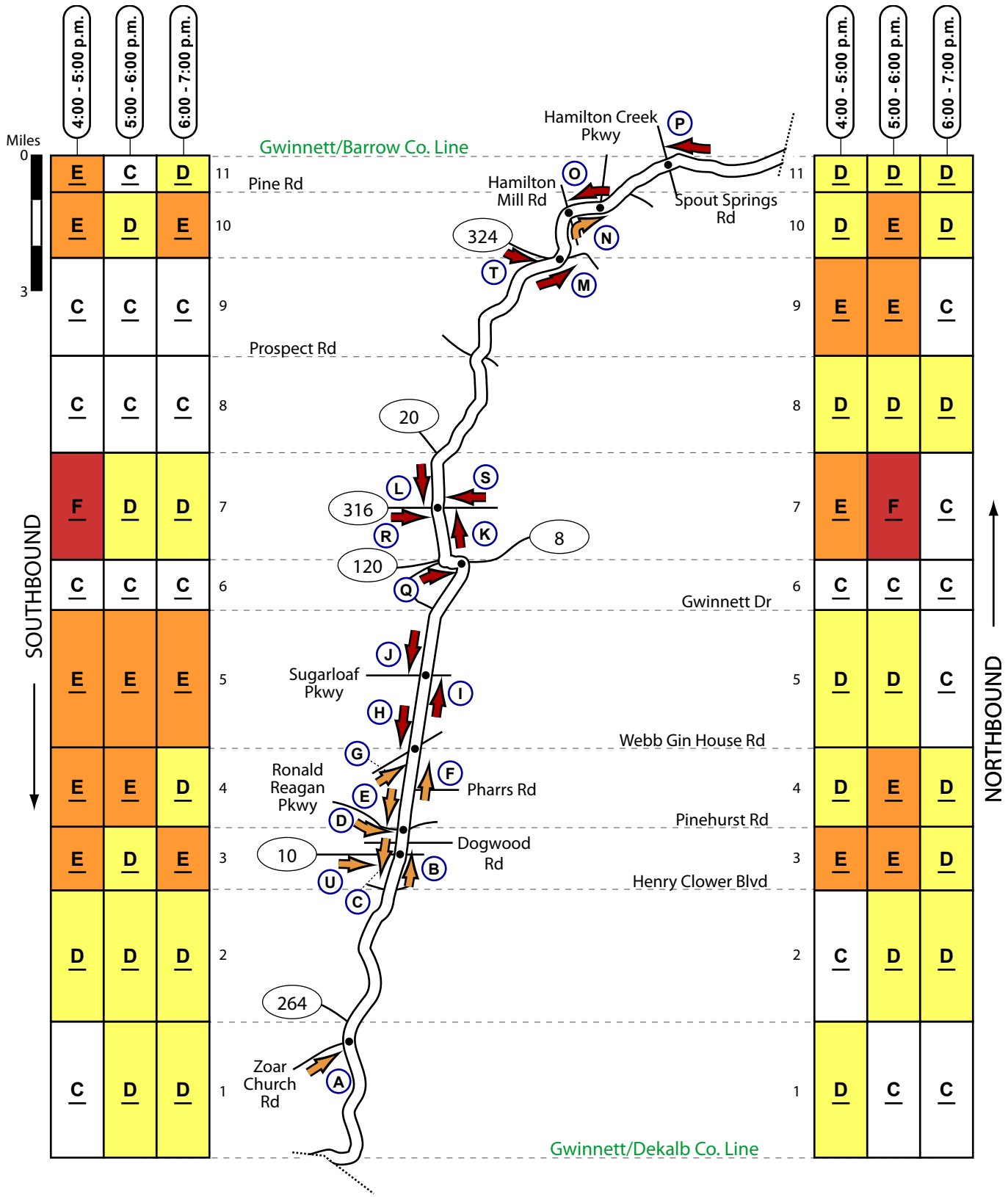
J
Congestion Type: Cross Road Signal Queue
Location: SR 316
Frequency: Most observations
Direction: Westbound
Queue Populations: 25 to 70 vpl
Number of Lanes: 2
(per 2007 data/analysis)

K
Congestion Type: Cross Road Signal Queue
Location: SR 324
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

L
Congestion Type: Cross Road Signal Queue
Location: SR 10
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Spring 2008

SR 124 (Gwinnett County) - Evening



Mile	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.	4:00 - 5:00 p.m.	5:00 - 6:00 p.m.	6:00 - 7:00 p.m.
11	E	C	D	D	D	D
10	E	D	E	D	E	D
9	C	C	C	E	E	C
8	C	C	C	D	D	D
7	F	D	D	E	F	C
6	C	C	C	C	C	C
5	E	E	E	D	D	C
4	E	E	D	D	E	D
3	E	D	E	E	E	D
2	D	D	D	C	D	D
1	C	D	D	D	C	C

Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 124 (Gwinnett County) - Evening

A
Congestion Type: Cross Road Signal Queue
Location: Zoar Church Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between Henry Clower Blvd & Pinehurst Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 2

C
Congestion Type: Platoons
Location: Between Pinehurst Rd & Henry Clower Blvd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to vpl
Number of Lanes: 2

D
Congestion Type: Cross Road Signal Queue
Location: Ronald Reagan Parkway
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Ronald Reagan Parkway
Frequency: On some days but not others
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

F
Congestion Type: Platoons
Location: Vicinity of Pharrs Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

G
Congestion Type: Cross Road Signal Queue
Location: Webb Gin House Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

H
Congestion Type: Mainline Signal Queue
Location: Webb Gin House Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During some observations, congestion backed through the upstream signal at Essex Dr.

I
Congestion Type: Left-Turn Queue
Location: Sugarloaf Parkway
Frequency: Most observations
Direction: Northbound
Number of Lanes: 1
Queue Population: 20 to 40 vpl
Note: During some observations, congestion extended back into the left-lane of Sugarloaf Parkway.

J
Congestion Type: Mainline Signal Queue
Location: Sugarloaf Parkway
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

K
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

L
Congestion Type: Mainline Signal Queue
Location: SR 316
Frequency: Most observations before 5:00 p.m.
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

M
Congestion Type: Mainline Signal Queue
Location: SR 324
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

N
Congestion Type: Platoons
Location: Vicinity of Hamilton Mill Parkway & Hamilton Creek Park
Frequency: Peak Hour
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

O
Congestion Type: Mainline Signal Queue
Location: Hamilton Mill Parkway
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1
Note: On some days but not others, congestion backed through the upstream signal at Hamilton Creek Parkway

P
Congestion Type: Mainline Signal Queue
Location: Spout Springs Rd
Frequency: Most observations before 4:30 p.m.
Direction: Southbound
Queue Population: 35 to 55 vpl
Number of Lanes: 1
Note: Congestion appeared to be exacerbated by the traffic exiting Mill Creek High School.

Q
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Most observations
Direction: Eastbound
Queue Population: 25 to 65 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically backed through the upstream signal at Jackson St.

R
Congestion Type: Cross Road Signal Queue
Location: SR 316
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
(per 2007 data/analysis)

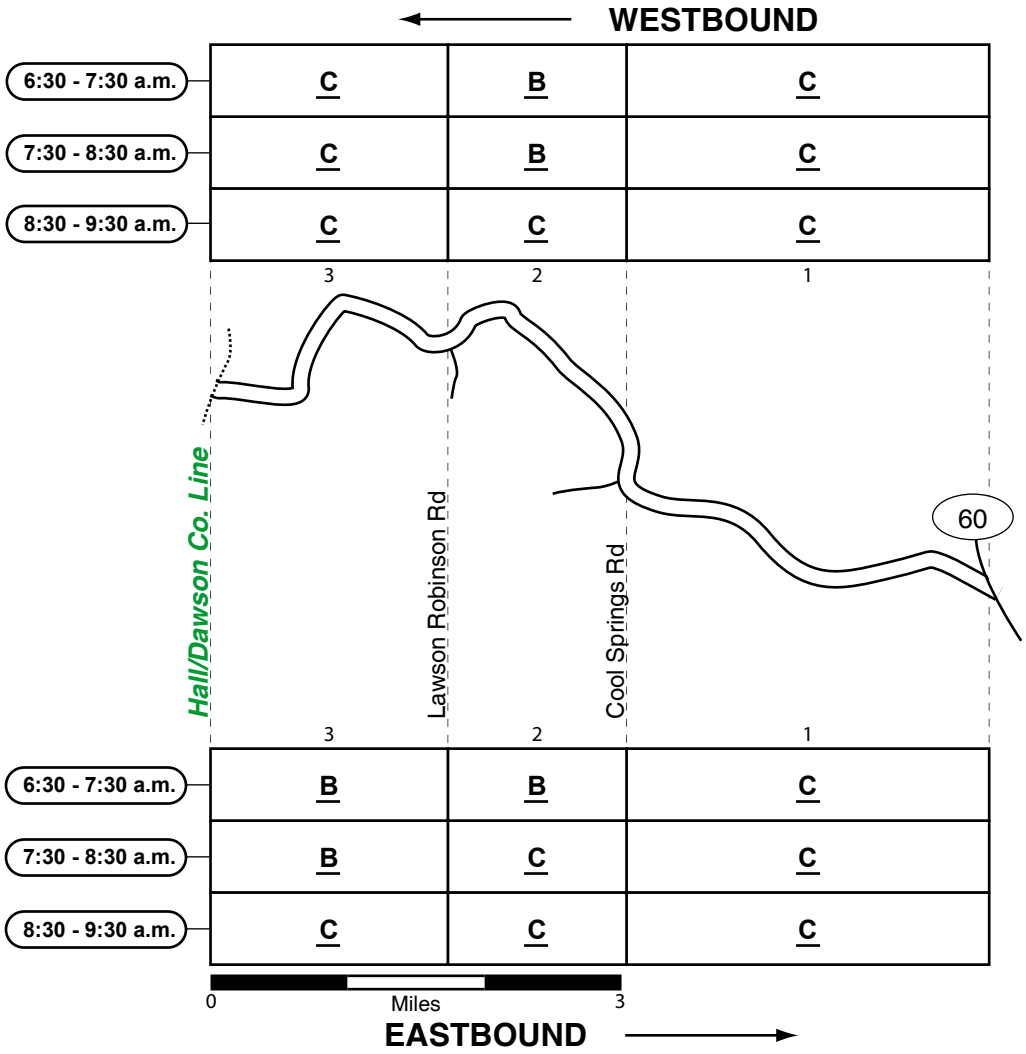
S
Congestion Type: Cross Road Signal Queue
Location: SR 316
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2
(per 2007 data/analysis)

T
Congestion Type: Cross Road Signal Queue
Location: SR 324
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: During one observation, the queue contained approximately 80 vehicles.

U
Congestion Type: Cross Road Signal Queue
Location: SR 120
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
(per 2007 data/analysis)

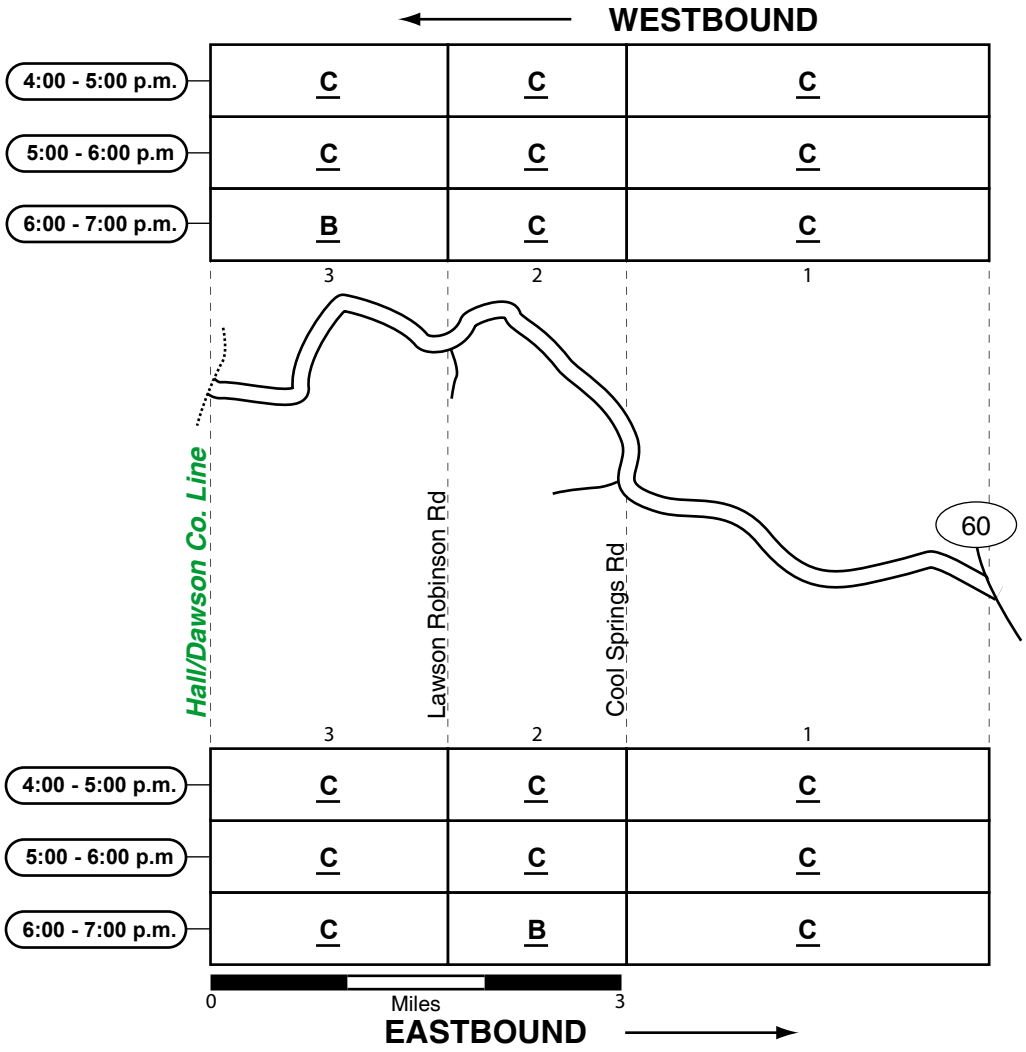
Spring 2008

SR 136 (Hall County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

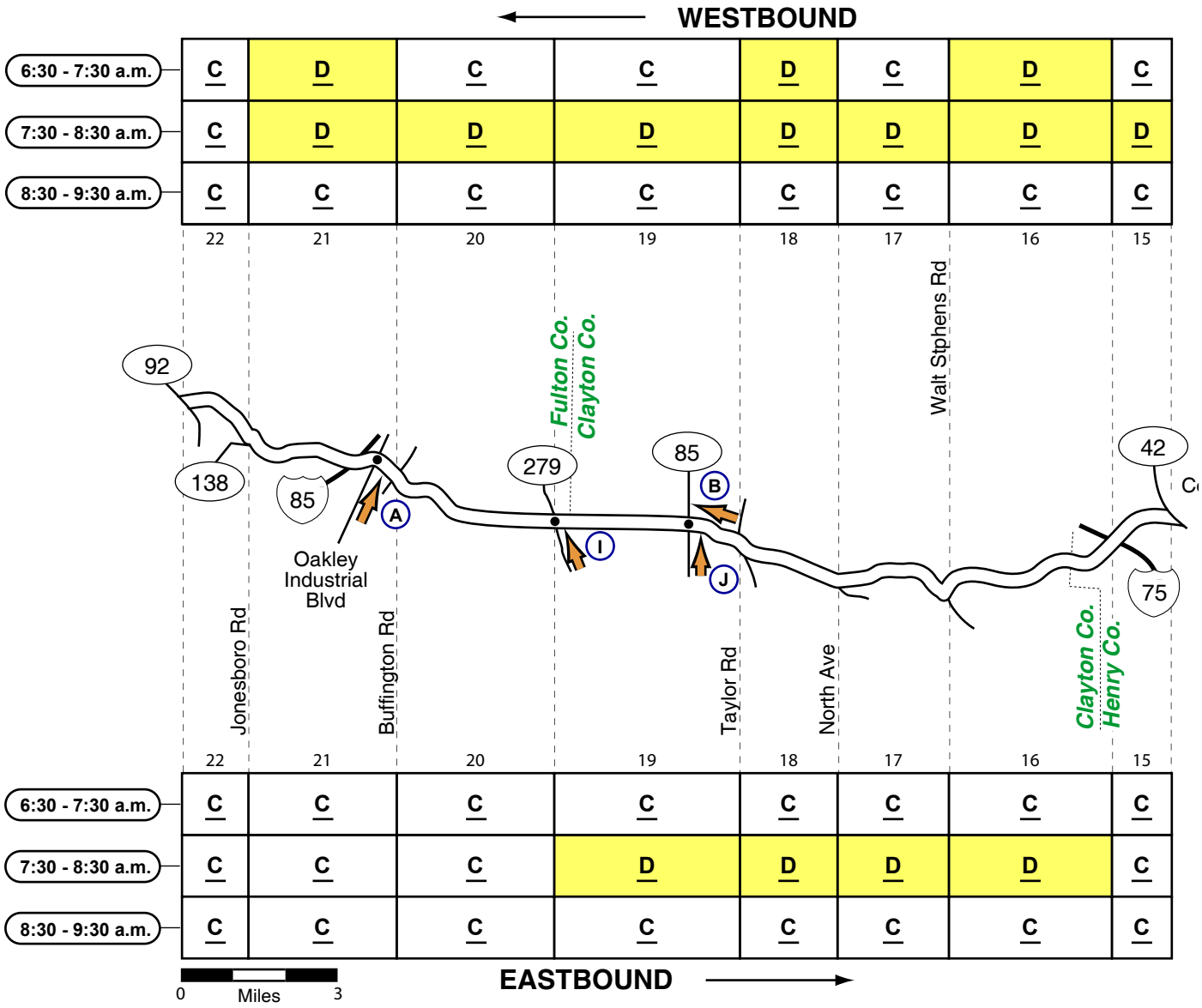
Spring 2008
SR 136 (Hall County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 138 (Henry/Clayton & Fulton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 138 (Henry/Clayton & Fulton Counties) - Morning

A
Congestion Type: Cross Road Signal Queue
Location: Oakley Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 85
Frequency: One time only
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

I
Congestion Type: Cross Road Signal Queue
Location: SR 279
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

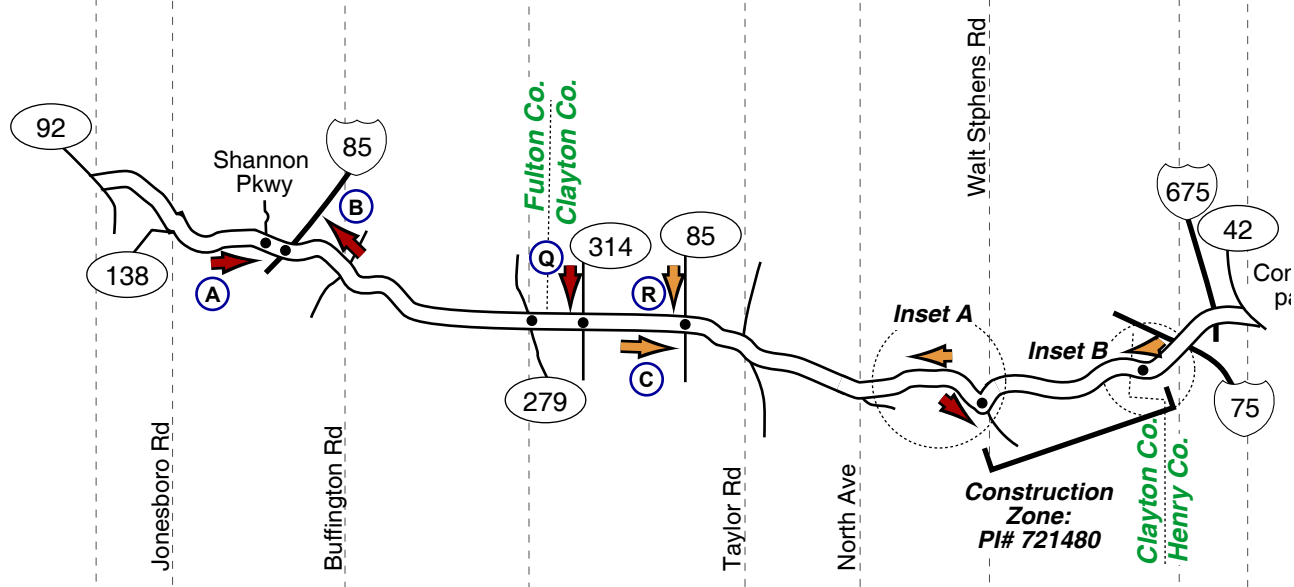
J
Congestion Type: Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Spring 2008

SR 138 (Henry/Clayton & Fulton Counties) - Evening

WESTBOUND

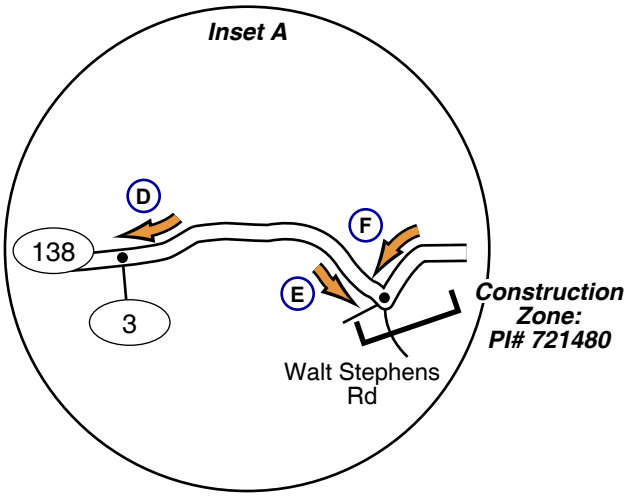
	22	21	20	19	18	17	16	15
4:00 - 5:00 p.m.	C	D	C	D	C	D	D	C
5:00 - 6:00 p.m.	C	E	C	D	C	E	E	C
6:00 - 7:00 p.m.	C	D	C	D	C	D	C	C

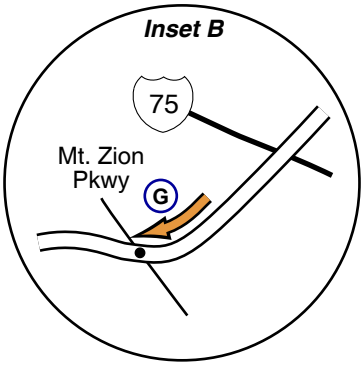


	22	21	20	19	18	17	16	15
4:00 - 5:00 p.m.	C	D	C	E	D	D	D	C
5:00 - 6:00 p.m.	C	E	D	E	C	E	D	D
6:00 - 7:00 p.m.	C	E	C	D	C	D	C	D

0 Miles 3

EASTBOUND





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 138 (Henry/Clayton & Fulton Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Shannon Pkwy
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: During one observation, congestion backed through the upstream signal at Shannon Parkway.

B
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 55 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Mainline Signal Queue
Location: SR 3
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Walt Stephens Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction at the intersection.

F
Congestion Type: Mainline Signal Queue
Location: Walt Stephens Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion may have been exacerbated by ongoing construction at the intersection.

G
Congestion Type: Left-Turn Queue
Location: Mt. Zion Parkway
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Intermittently, congestion extended back into the left lane of SR 138

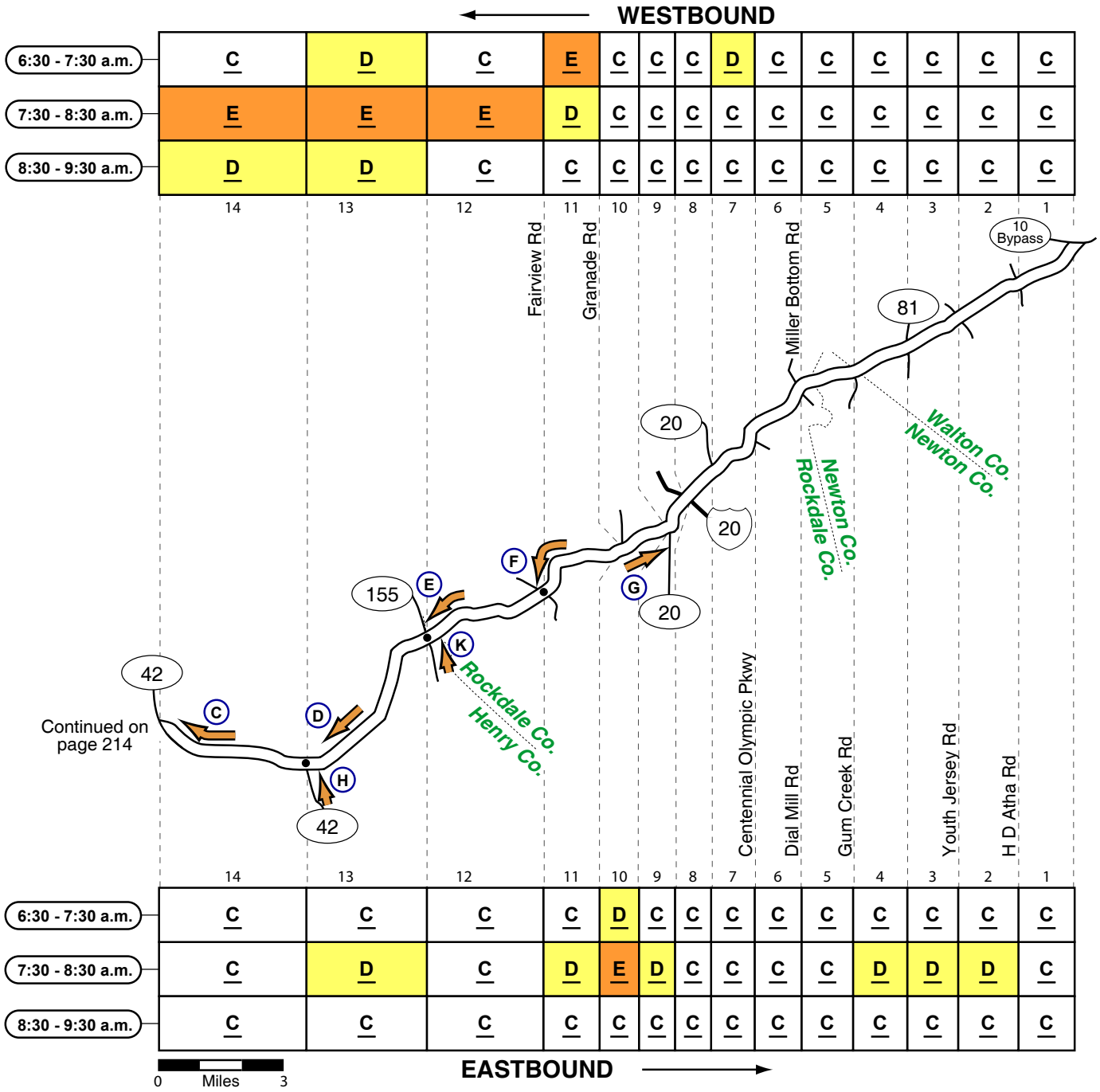
Q
Congestion Type: Cross Road Signal Queue
Location: SR 314
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

R
Congestion Type: Cross Road Signal Queue
Location: SR 85
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Construction Zone
PI# 721480
Description: Roadway Widening

Spring 2008

SR 138 (Walton/Newton/Rockdale & Henry Counties) - Morning



	14	13	12	11	10	9	8	7	6	5	4	3	2	1
6:30 - 7:30 a.m.	C	D	C	E	C	C	C	D	C	C	C	C	C	C
7:30 - 8:30 a.m.	E	E	E	D	C	C	C	C	C	C	C	C	C	C
8:30 - 9:30 a.m.	D	D	C	C	C	C	C	C	C	C	C	C	C	C

	14	13	12	11	10	9	8	7	6	5	4	3	2	1
6:30 - 7:30 a.m.	C	C	C	C	D	C	C	C	C	C	C	C	C	C
7:30 - 8:30 a.m.	C	D	C	D	E	D	C	C	C	C	D	D	D	C
8:30 - 9:30 a.m.	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 138 (Walton/Newton/Rockdale & Henry Counties) - Morning

C
Congestion Type: Platoons
Location: Between Atlanta Rd & SR 42
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

D
Congestion Type: Platoons
Location: Between SR 155 & SR 42
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Fairview Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

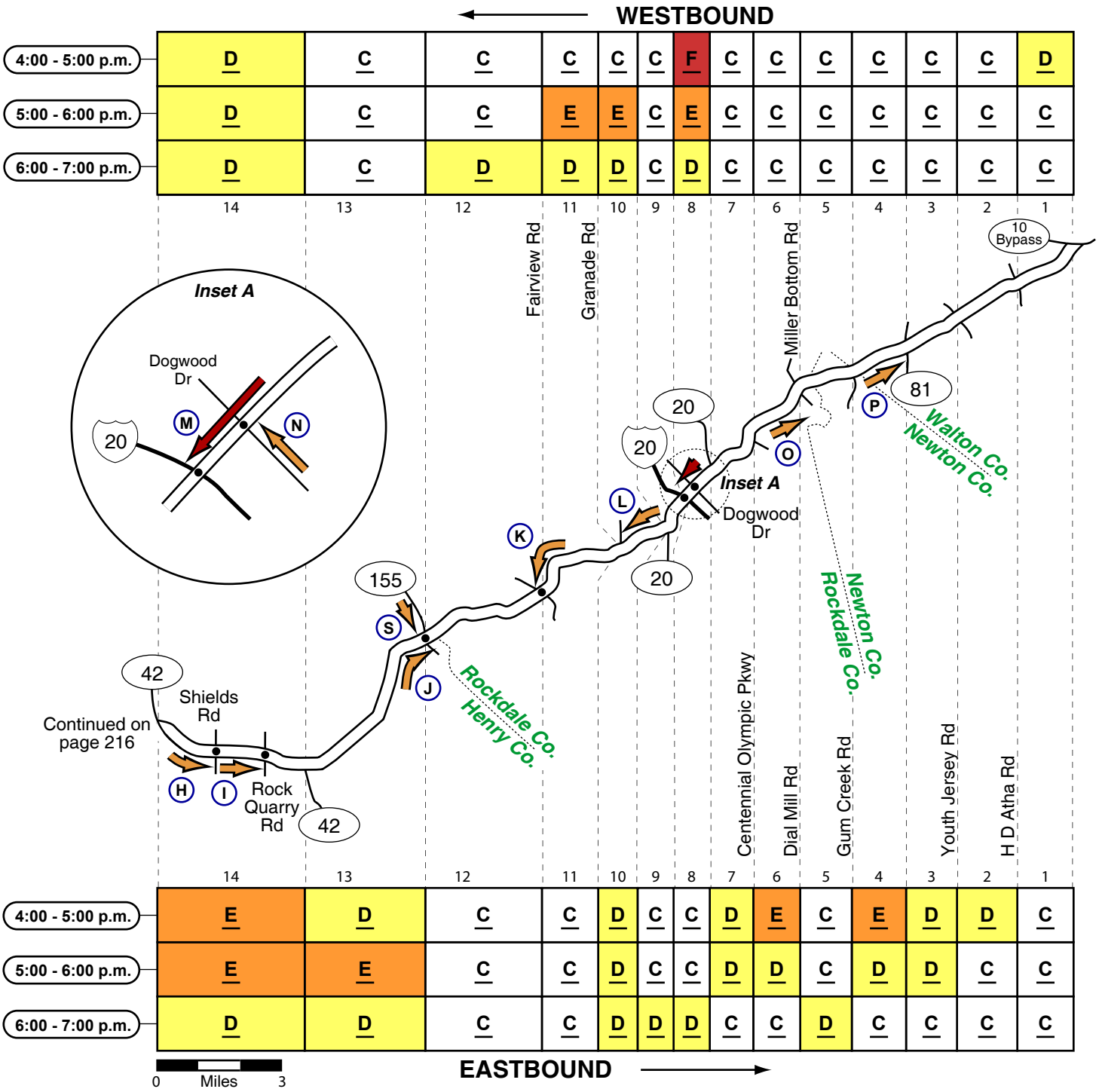
G
Congestion Type: Platoons
Location: Between Granade Rd & SR 20
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

H
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

K
Congestion Type: Cross Road Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 138 (Walton/Newton/Rockdale & Henry Counties) - Evening



	14	13	12	11	10	9	8	7	6	5	4	3	2	1
4:00 - 5:00 p.m.	D	C	C	C	C	C	F	C	C	C	C	C	C	D
5:00 - 6:00 p.m.	D	C	C	E	E	C	E	C	C	C	C	C	C	C
6:00 - 7:00 p.m.	D	C	D	D	D	C	D	C	C	C	C	C	C	C

	14	13	12	11	10	9	8	7	6	5	4	3	2	1
4:00 - 5:00 p.m.	E	D	C	C	D	C	C	D	E	C	E	D	D	C
5:00 - 6:00 p.m.	E	E	C	C	D	C	C	D	D	C	D	D	C	C
6:00 - 7:00 p.m.	D	D	C	C	D	D	D	C	C	D	C	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 138 (Walton/Newton/Rockdale & Henry Counties) - Evening

H
Congestion Type: Mainline Signal Queue
Location: Shields Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: Rock Quarry Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

J
Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

K
Congestion Type: Mainline Signal Queue
Location: Fairview Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

L
Congestion Type: Platoons
Location: Between SR 20 & Granade Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 30 to 35 vpl
Number of Lanes: 1

M
Congestion Type: Mainline Signal Queue
Location: I-20
Frequency: On some days but not others
Direction: Westbound
Queue Population: 30 to 50 vpl
Number of Lanes: 2
Note: Intermitently, congestion extended back through the upstream signal at Dogwood Dr.

N
Congestion Type: Cross Road Signal Queue
Location: Dogwood Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: The head of the queue was found in the two left-turn lanes

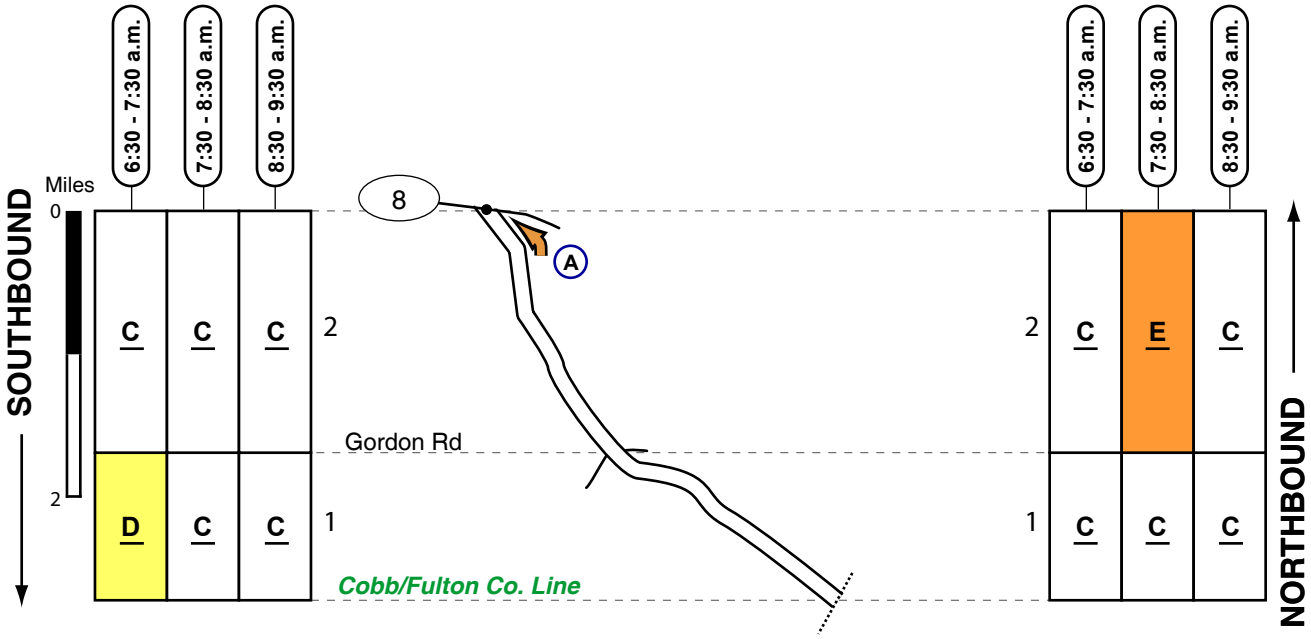
O
Congestion Type: Platoons
Location: Between Centennial Olympic Parkway & Dial Mill Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

P
Congestion Type: Platoons
Location: Between Gum Creek Rd & SR 81
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

S
Congestion Type: Cross Road Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 139 (Cobb County) - Morning

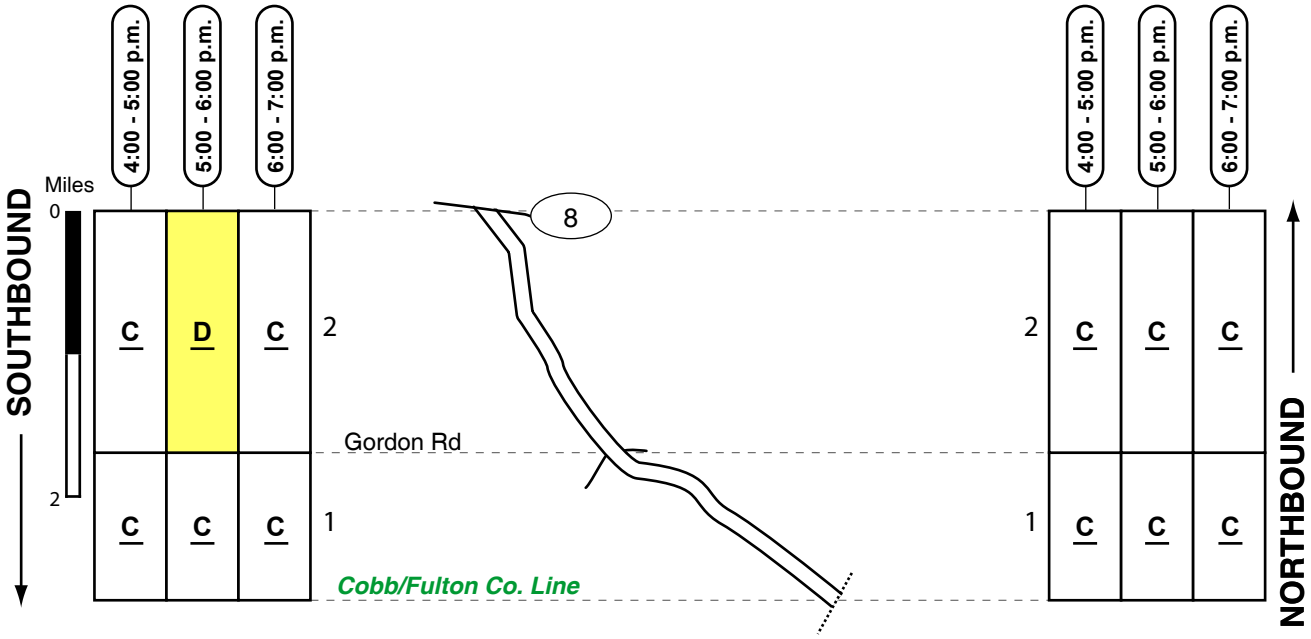


A
Congestion Type: Mainline Signal Queue
Location: SR 8/US 278
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

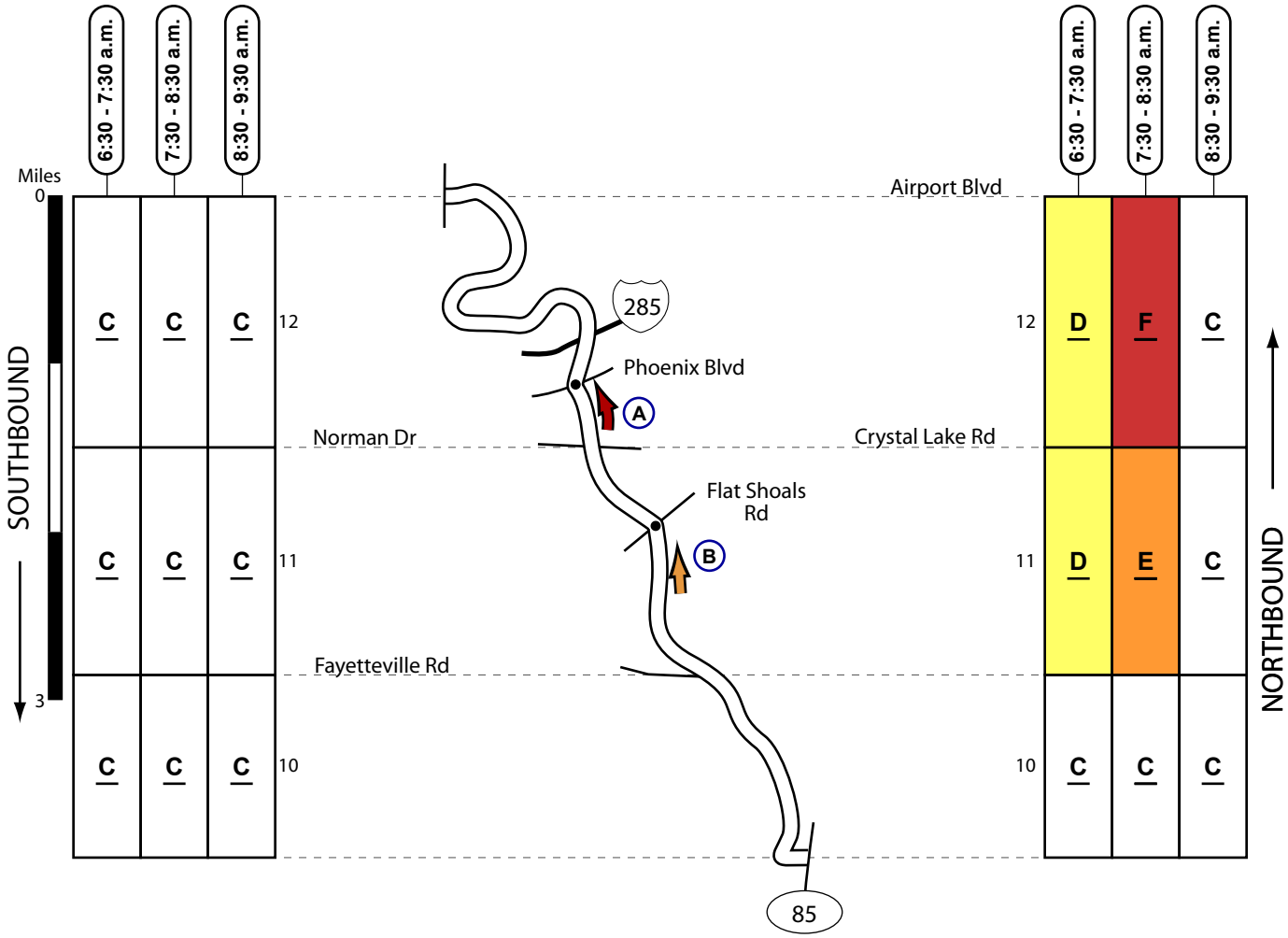
SR 139 (Cobb County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 139 (Clayton County) - Morning

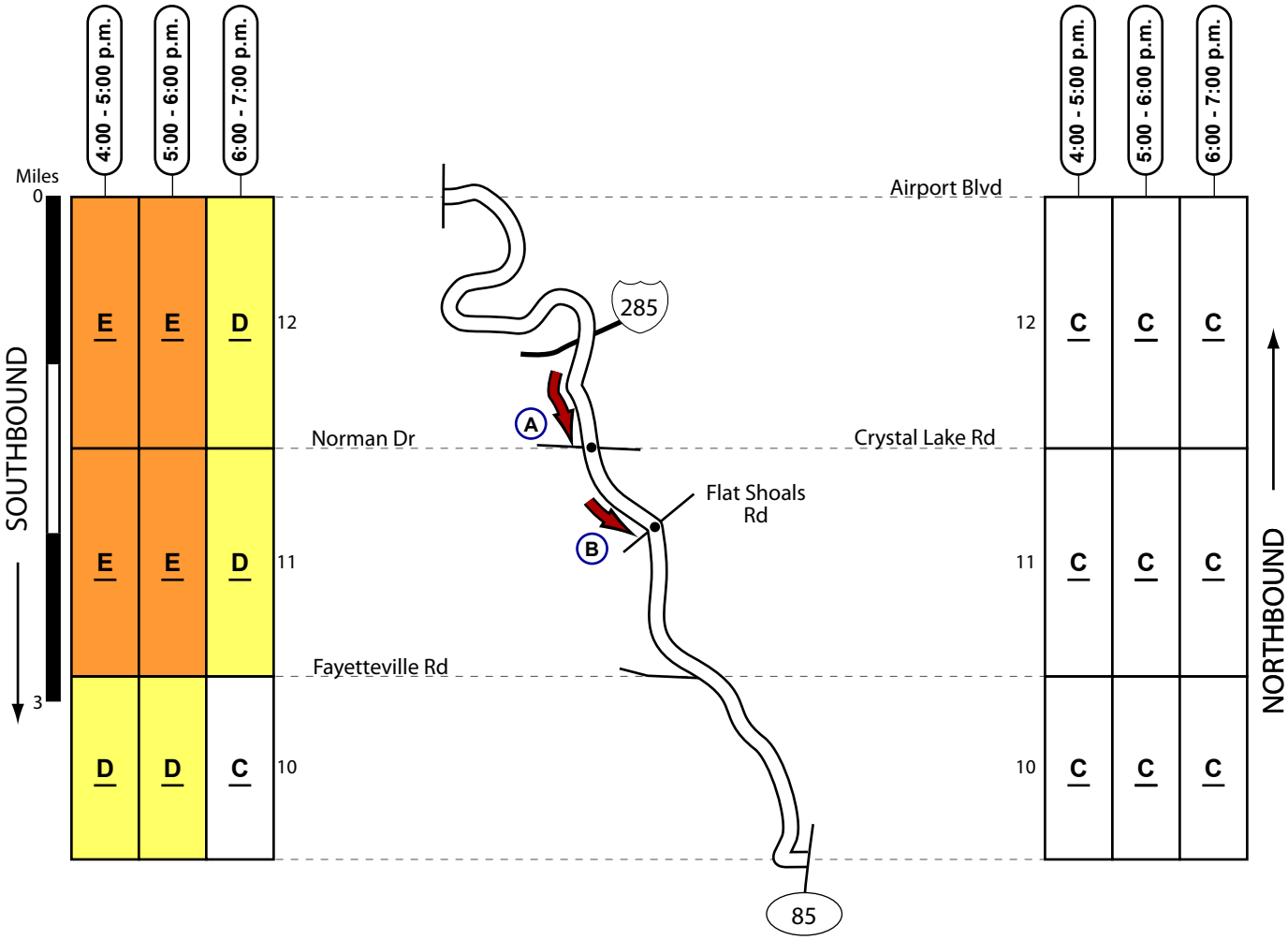


A
Congestion Type: Mainline Signal Queue
Location: Phoenix Blvd
Frequency: On some days but not others
Direction: Northbound
Queue Population: 35 to 45 vpl
Number of Lanes: 2

B
Congestion Type: Platoons
Location: vicinity of Flat Shoals Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 139 (Clayton County) - Evening



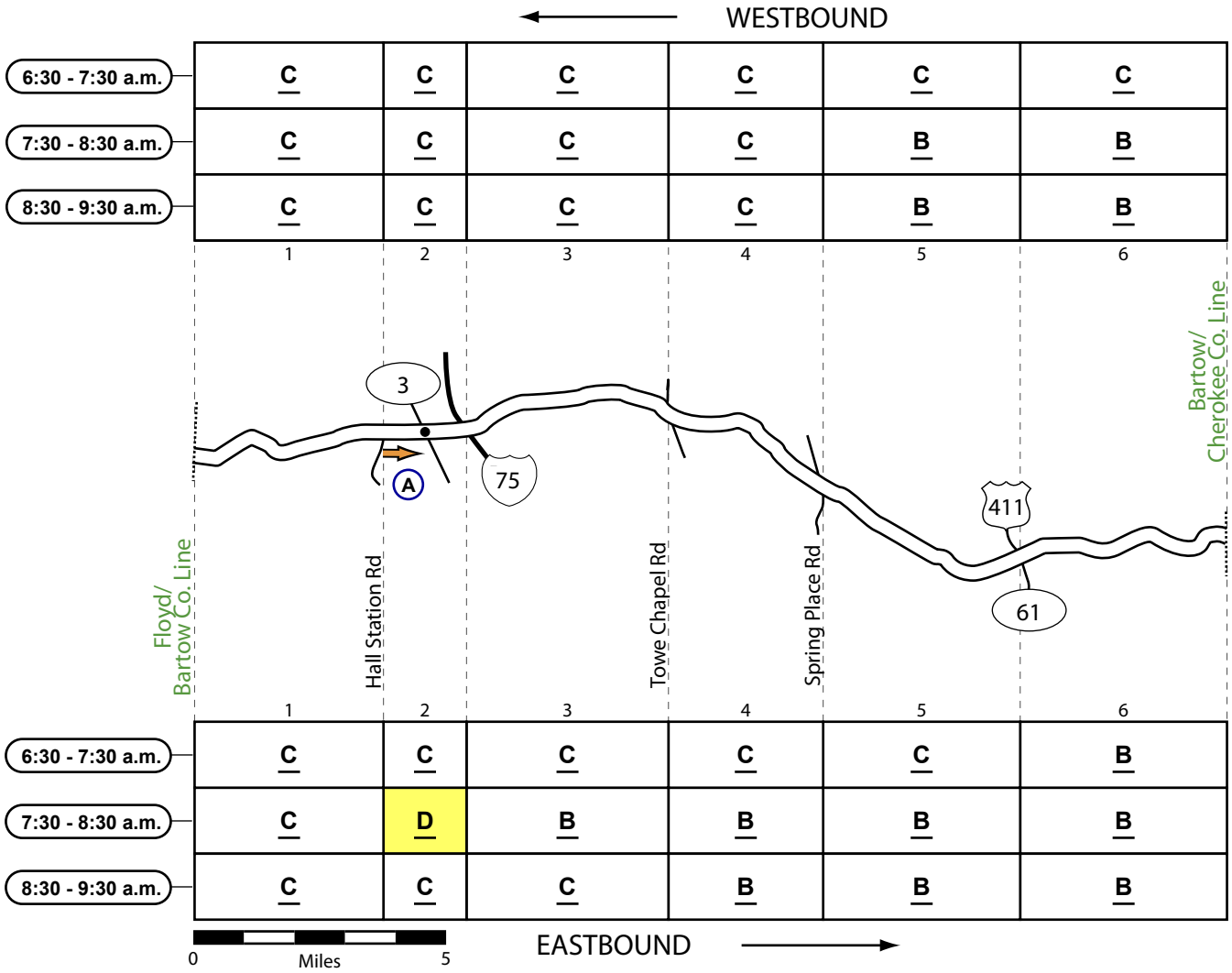
A
Congestion Type: Mainline Signal Queue
Location: Norman Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Flat Shoals Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 140 (Bartow County) - Morning

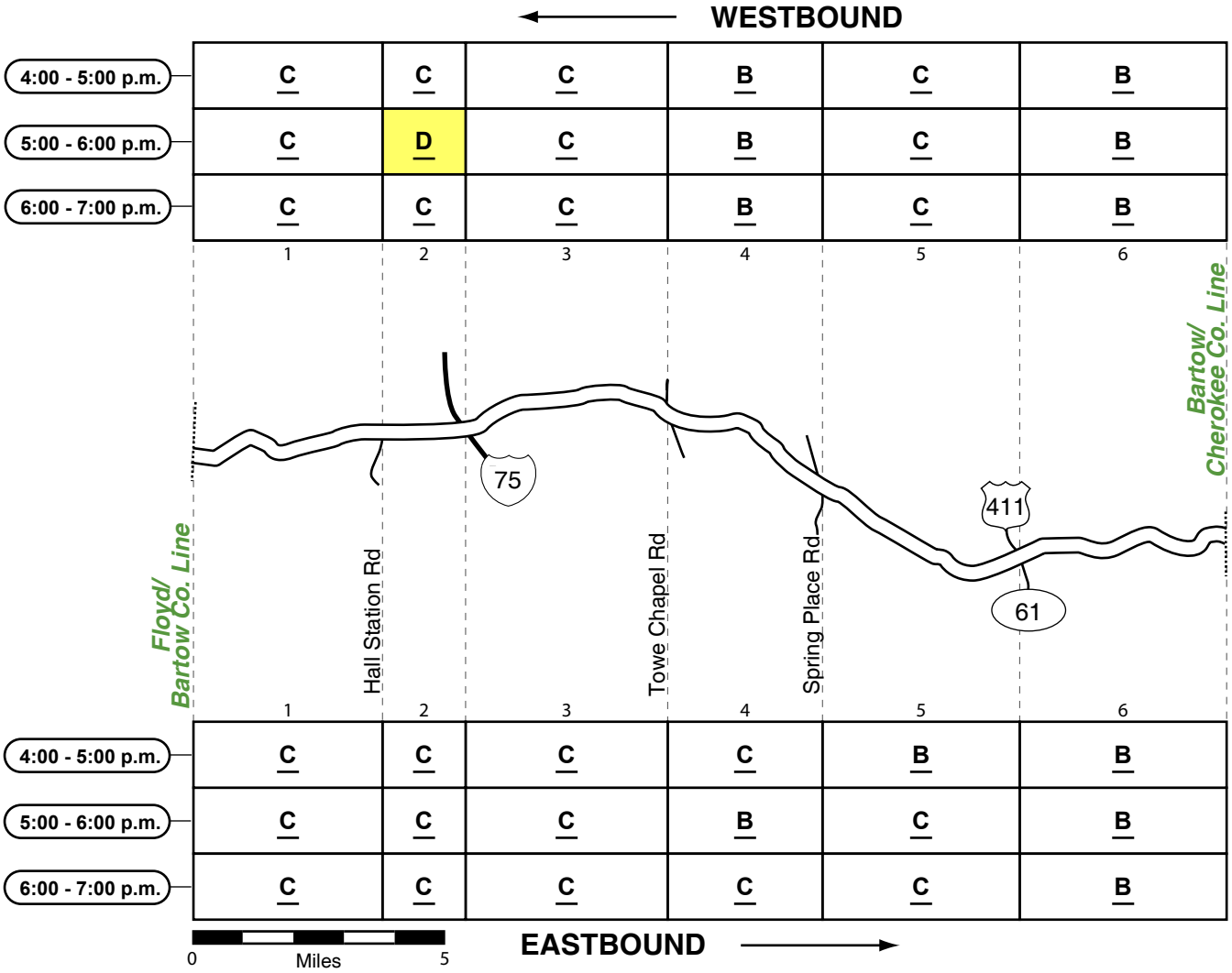


A
Congestion Type: Mainline Signal Queue
Location: SR 3 / US 41
Frequency: Intermittent
Direction: Eastbound
Queue Population: 30 to 35 vpl
Number of Lanes: 1
Note: During one observation only (7:53 a.m.), eastbound congestion was found approaching the signal at SR 3; queue populations did not exceed 20 vehicles during any other observation.

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 140 (Bartow County) - Evening

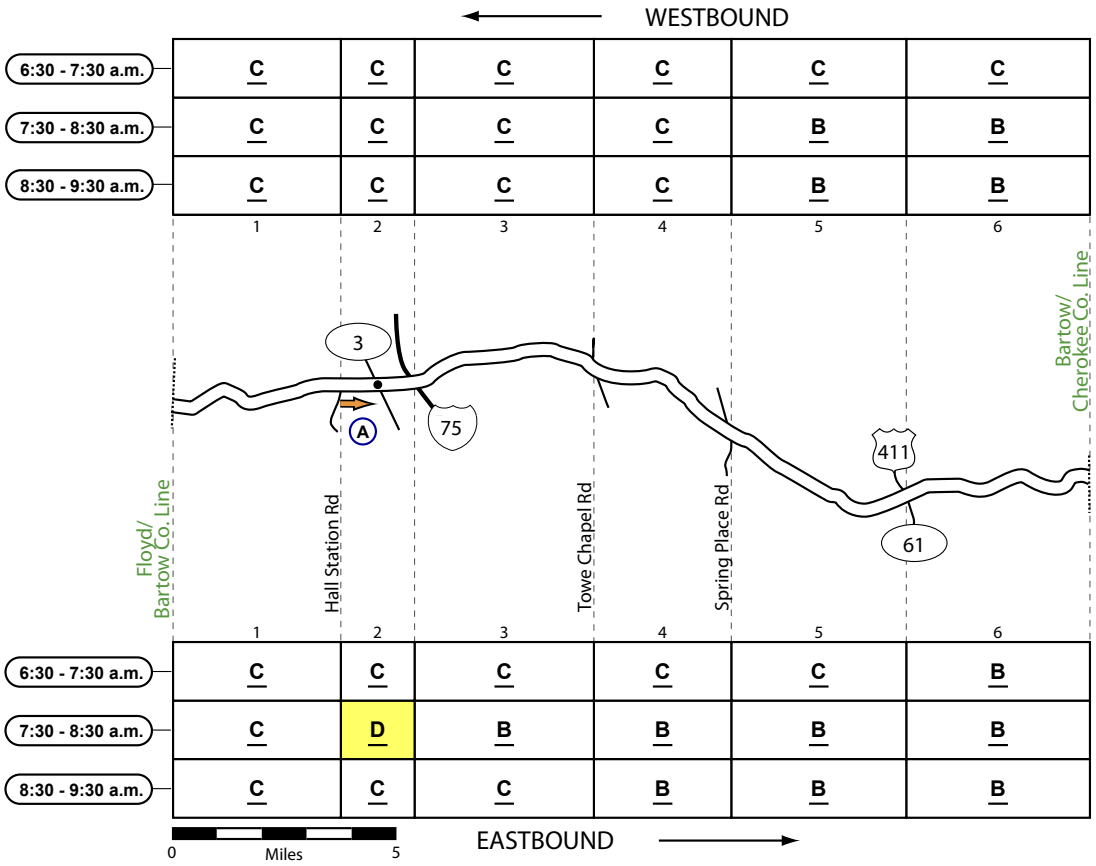


Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 140 (Fulton & Gwinnett Counties) - Morning

SR 140 (Bartow County)
Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 140 (Fulton & Gwinnett Counties) - Morning

A
Congestion Type: Signal Queue
Location: Old Alabama Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 30 to 80 vpl
Number of Lanes: 2
Note: During some observations, northbound congestion at Old Alabama Rd extended back through the upstream signal at Holcomb Woods Pkwy. Intermittently, downstream congestion approaching the signal at Market Blvd may have adversely affected throughput at the signal at Old Alabama Rd.

B
Congestion Type: Congested Cross Road
Location: Old Alabama Rd
Frequency: Most observations during the peak period.
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1
Note: When congested, the head of the queue was found in the dedicated right-turn lane (to northbound SR 140); during some observations, congestion on Old Alabama Rd approaching SR 140 extended back through the upstream signal at Holcomb Woods Pkwy.

C
Congestion Type: Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2
Note: When congested, vehicles were queued in the two leftturn lanes waiting to turn onto the SR 400 southbound ramp.

D
Congestion Type: Signal Queue
Location: SR 400
Frequency: Most observations
Direction: Southbound
Queue Populations: 25 to 50 vpl
Number of Lanes: 2
Note: During the peak period, a mostly continuous queue extended through the series signals between SR 400 and Old Roswell Rd (a distance of approximately one mile).

E
Congestion Type: Signal Queue
Location: Dogwood Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 3

F
Congestion Type: Signal Queue
Location: Old Holcomb Bridge Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 3

G
Congestion Type: Signal Queue
Location: Warsaw Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 40 to 60 vpl
Number of Lanes: 3

H
Congestion Type: Signal Queue
Location: Old Roswell Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

I
Congestion Type: Signal Queue
Location: Nesbit Ferry Rd
Frequency: Most observations peak period
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Signal Queue
Location: Spalding Dr
Frequency: Most observations peak period
Direction: Southbound
Queue Populations: 20 to 80 vpl
Number of Lanes: 2
Note: During the peak period, southbound congestion typically extended back across the Chattahoochee River.

K
Congestion Type: Signal Queue
Location: Barnwell Rd/Ellard Dr
Frequency: Most observations peak period
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

L
Congestion Type: Congested Cross Road
Location: Nesbit Ferry Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2

M
Congestion Type: Congested Cross Road
Location: Barnwell Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

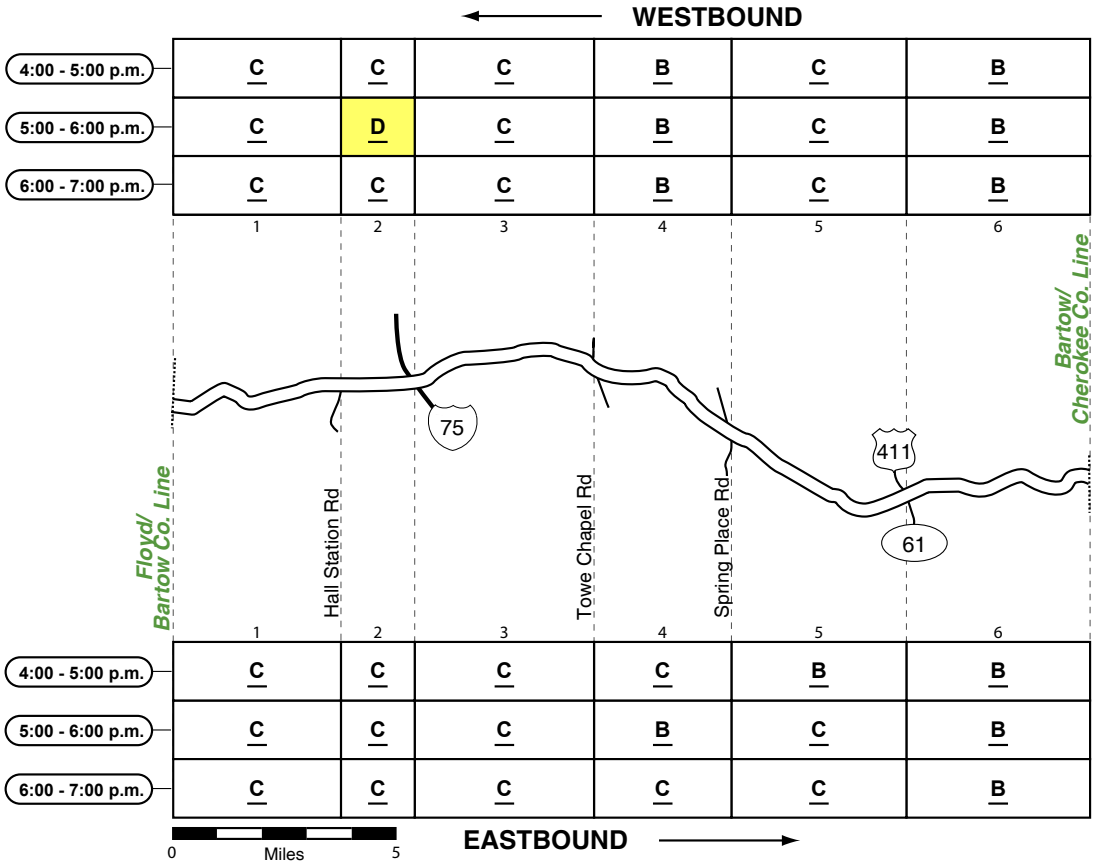
N
Congestion Type: Congested Cross Road
Location: Peachtree Corners Circle
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left turn bay waiting to turn northbound on SR 140.

O
Congestion Type: Congested Cross Road
Location: SR 120
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

Fall 2007

SR 140 (Fulton & Gwinnett Counties) - Evening

SR 140 (Bartow County)
Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 140 (Fulton & Gwinnett Counties) - Evening

A
Congestion Type: Signal Queue
Location: Grimes Bridge Rd/Old Roswell Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

B
Congestion Type: Signal Queue
Location: Terramont Dr/Martins Landing Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

C
Congestion Type: Signal Queue
Location: Eves Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 3

D
Congestion Type: Signal Queue
Location: Spalding Dr/River Exchange Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2
Note: The head of the queue south of the Chattahoochee River appeared to alternate between the signals at River Exchange Dr and Spalding Dr.

E
Congestion Type: Signal Queue
Location: Peachtree Corners Circle
Frequency: Most observations peak period
Direction: Southbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2
Note: During one observation, approximately 60 vehicles per lane were queued at the signal.

F
Congestion Type: Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Spalding Dr/Wetherburn Way
Frequency: Most observations peak period
Direction: Northbound
Queue Populations: 25 to 75 vpl
Number of Lanes: 2
Note: During some observations, northbound congestion approaching Spalding Dr extended back through the upstream signal at Wetherburn Way.

H
Congestion Type: Signal Queue
Location: Barnwell Rd/Ellard Dr
Frequency: Most observations
Direction: Northbound
Queue Populations: 25 to 115 vpl
Number of Lanes: 2
Note: During the peak period, northbound congestion approaching Barnwell Rd typically extended back across the Chattahoochee River.

I
Congestion Type: Signal Queue
Location: Old Alabama Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Signal Queue
Location: Old Roswell Rd/Grimes Bridge Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

L
Congestion Type: Signal Queue
Location: Warsaw Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

M
Congestion Type: Signal Queue
Location: Old Holcomb Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

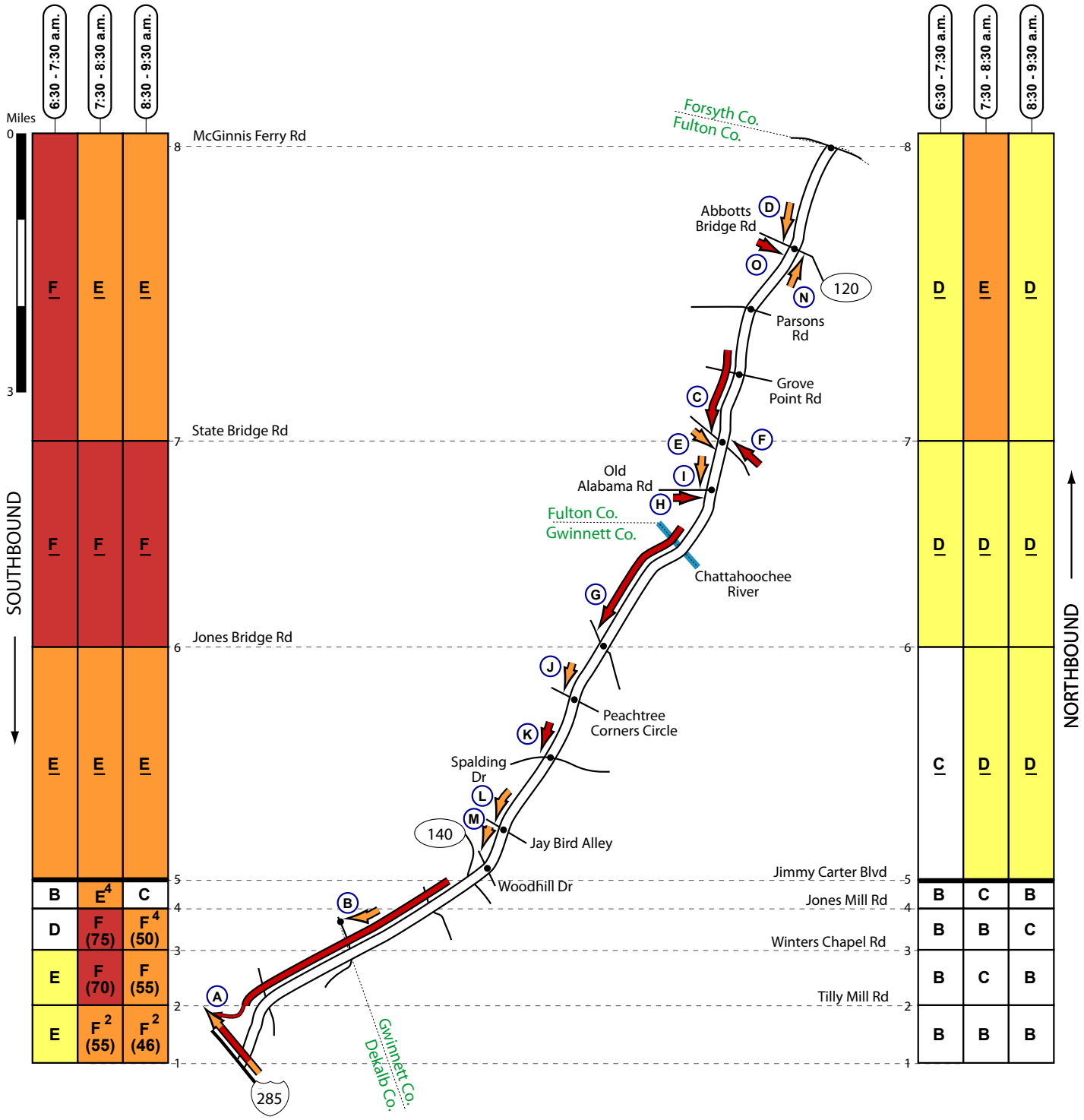
N
Congestion Type: Signal Queue
Location: Dogwood Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, northbound congestion approaching Dogwood Rd extended back throught the upstream signal at SR 400.

O
Congestion Type: Congested Cross Road
Location: Old Roswell Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 1

P
Congestion Type: Congested Cross Road
Location: Warsaw Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

Fall 2007

SR 141 (Fulton/Gwinnett & Dekalb Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 141 (Fulton/Gwinnett & Dekalb Counties) - Morning

A
Congestion Type: Mainline Congestion
Frequency: Most observations
Direction: Southbound
Location: Between Jimmy Carter Blvd and I-285
Queue Length: 2 to 3 miles
Estimated Speed: 20 to 40 mph
Potential Cause(s): The head of the queue was found on the ramp to I-285; congestion typically extended back into the right lane (and eventually across all lanes) of SR 141.

B
Congestion Type: Exit Ramp Queue
Location: Winters Chapel Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: Three

C
Congestion Type: Signal Queue
Location: State Bridge Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 80 vpl
Number of Lanes: 2
Note: During some observations, southbound congestion approaching the signal at State Bridge Rd extended back through several upstream signals (Grove Point Rd and Medlock Bridge Pkwy).

D
Congestion Type: Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Congested Cross Road
Location: State Bridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

F
Congestion Type: Congested Cross Road
Location: State Bridge Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: Jones Bridge Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 175 vpl
Number of Lanes: 2
Note: During the peak period, southbound congestion approaching the signal at Jones Bridge Rd typically extended back across the Chattahoochee River to the vicinity of Old Alabama Rd (a distance of approximately two miles).

H
Congestion Type: Congested Cross Road
Location: Old Alabama Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left lane of two waitng at the signal to turn northbound onto SR 141.

I
Congestion Type: Signal Queue
Location: Old Alabama Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Signal Queue
Location: Peachtree Corners Circle
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Signal Queue
Location: Spalding Dr
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

L
Congestion Type: Signal Queue
Location: Jay Bird Alley
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

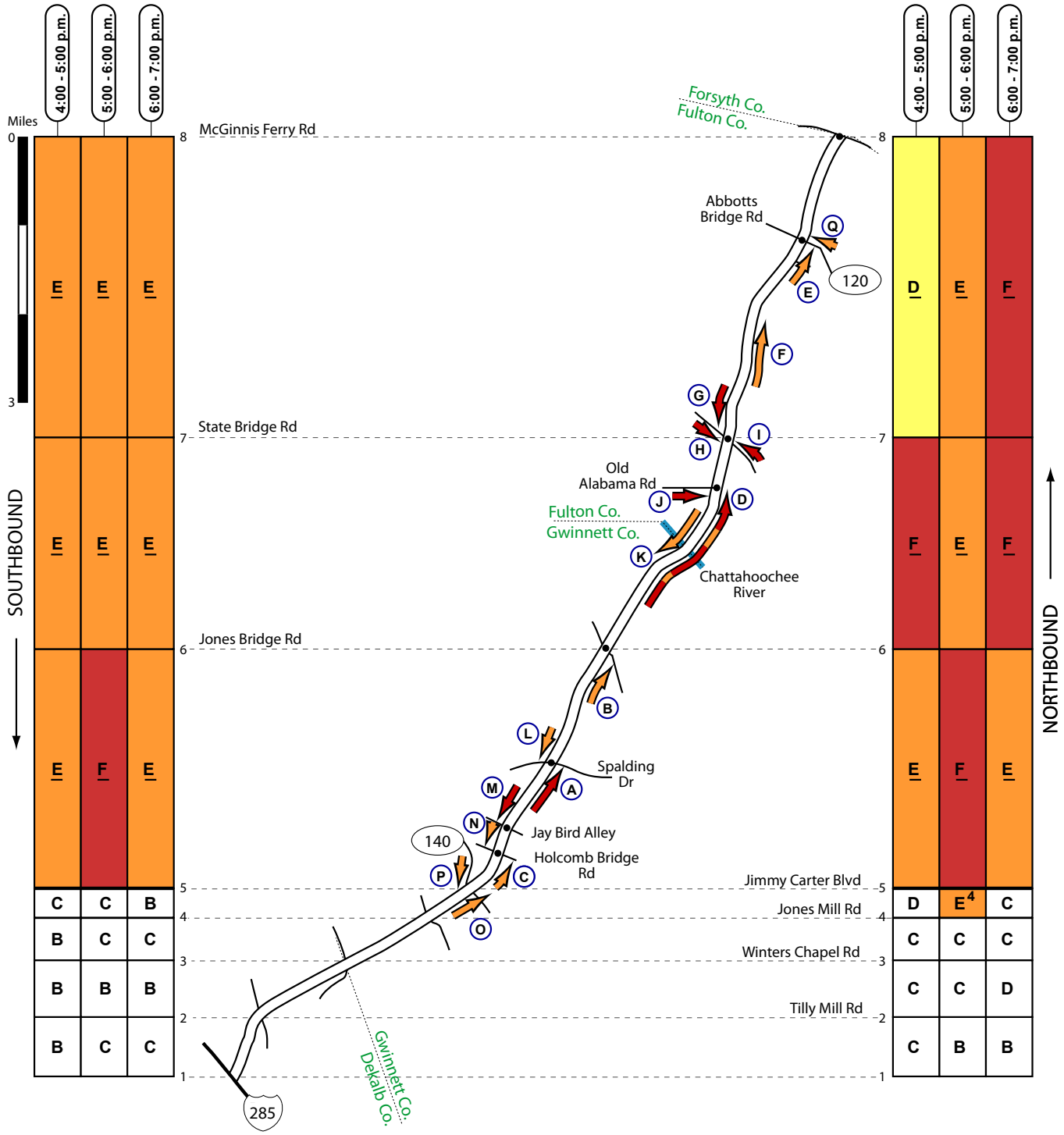
M
Congestion Type: Signal Queue
Location: Woodhill Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

N
Congestion Type: Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

O
Congestion Type: Congested Cross Road
Location: SR 120
Frequency: Most observations
Direction: Eastbound
Queue Populations: 35 to 45 vpl
Number of Lanes: 1

Fall 2007

SR 141 (Fulton/Gwinnett & Dekalb Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 141 (Fulton/Gwinnett & Dekalb Counties) - Evening

A
Congestion Type: Signal Queue
Location: Spalding Dr
Frequency: Most observations
Direction: Northbound
Queue Populations: 30 to 65 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

C
Congestion Type: Signal Queue
Location: Holcomb Bridge Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

D
Congestion Type: Signal Queue
Location: Old Alabama Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 40 to 150 vpl
Number of Lanes: 2
Note: During the peak period, congestion typically extended back across the Chattahoochee River; on two of the mornings surveyed, congestion extended all the way back to Jones Bridge Rd (a distance of approximately 2 miles).

E
Congestion Type: Signal Queue
Location: SR 120 (Abbotts Bridge Rd)
Frequency: Intermittent
Direction: Northbound
Queue Populations: 40 to 45 vpl
Number of Lanes: 2

F
Congestion Type: Platoons
Location: Between State Bridge Rd & SR 120
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

G
Congestion Type: Signal Queue
Location: State Bridge Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 65 vpl
Number of Lanes: 2
Note: During some observations, congestion in the left-turn bay extended back into the left lane on SR 141.

H
Congestion Type: Congested Cross Road
Location: State Bridge Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2

I
Congestion Type: Congested Cross Road
Location: State Bridge Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Congested Cross Road
Location: Old Alabama Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the left lane waiting to turn northbound onto SR 141.

K
Congestion Type: Platoons
Location: Between State Bridge Rd & Jones Bridge Rd
Frequency: Most observations
Direction: Southbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

L
Congestion Type: Signal Queue
Location: Spalding Dr
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

M
Congestion Type: Signal Queue
Location: Jay Bird Alley
Frequency: Most observations
Direction: Southbound
Queue Populations: 30 to 45 vpl
Number of Lanes: 2

N
Congestion Type: Signal Queue
Location: Holcomb Bridge Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

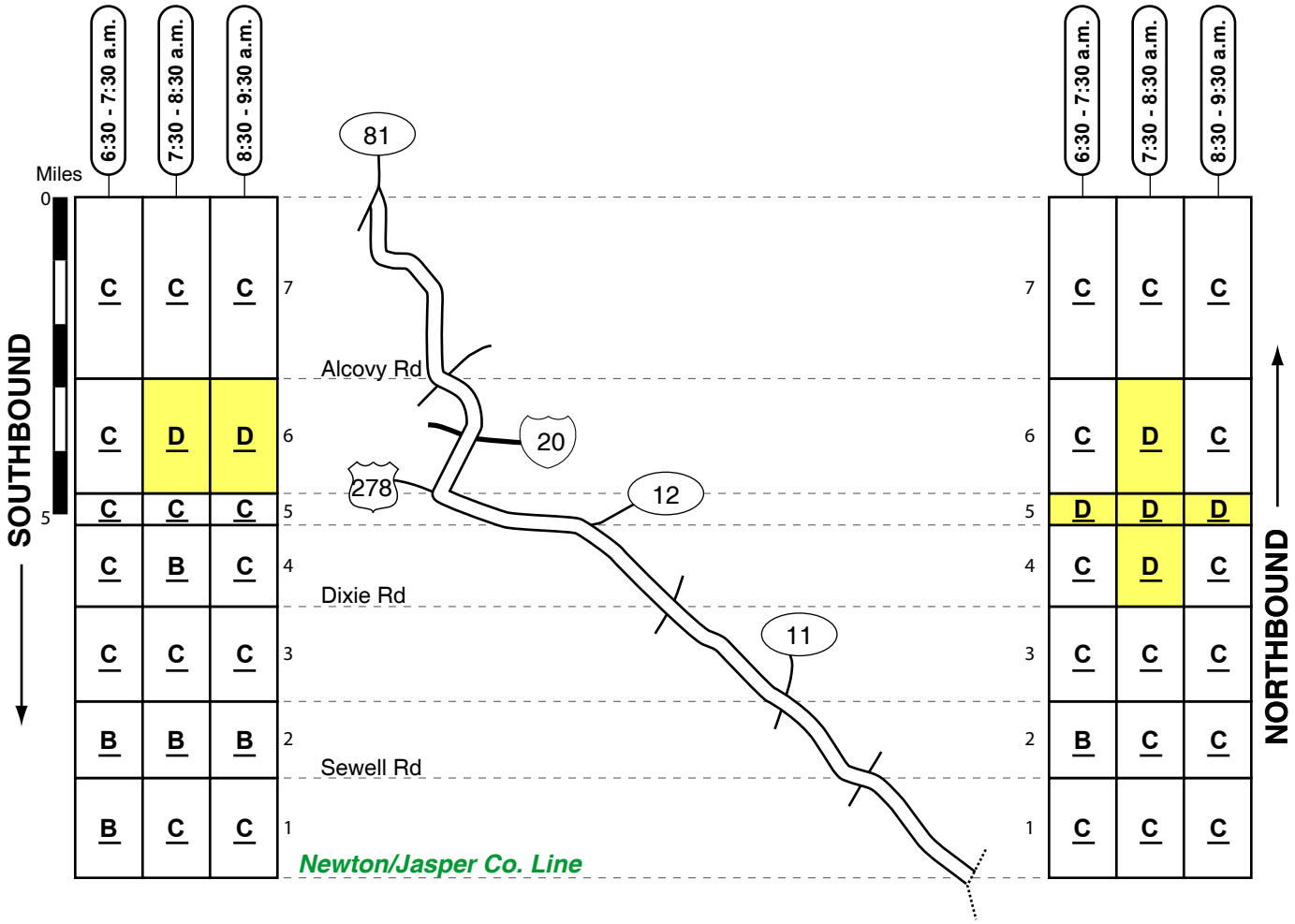
O
Congestion Type: Mainline Congestion
Frequency: On some days but not others
Direction: Northbound
Location: Between Jones Mill Rd and Holcomb Bridge Rd
Queue Length: .5 to 1 miles
Potential Cause(s): The signal at the freeway terminus at Holcomb Bridge Rd

P
Congestion Type: Congested Cross Road
Location: SR 140
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Q
Congestion Type: Congested Cross Road
Location: SR 120
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Spring 2008

SR 142 (Newton County) - Morning

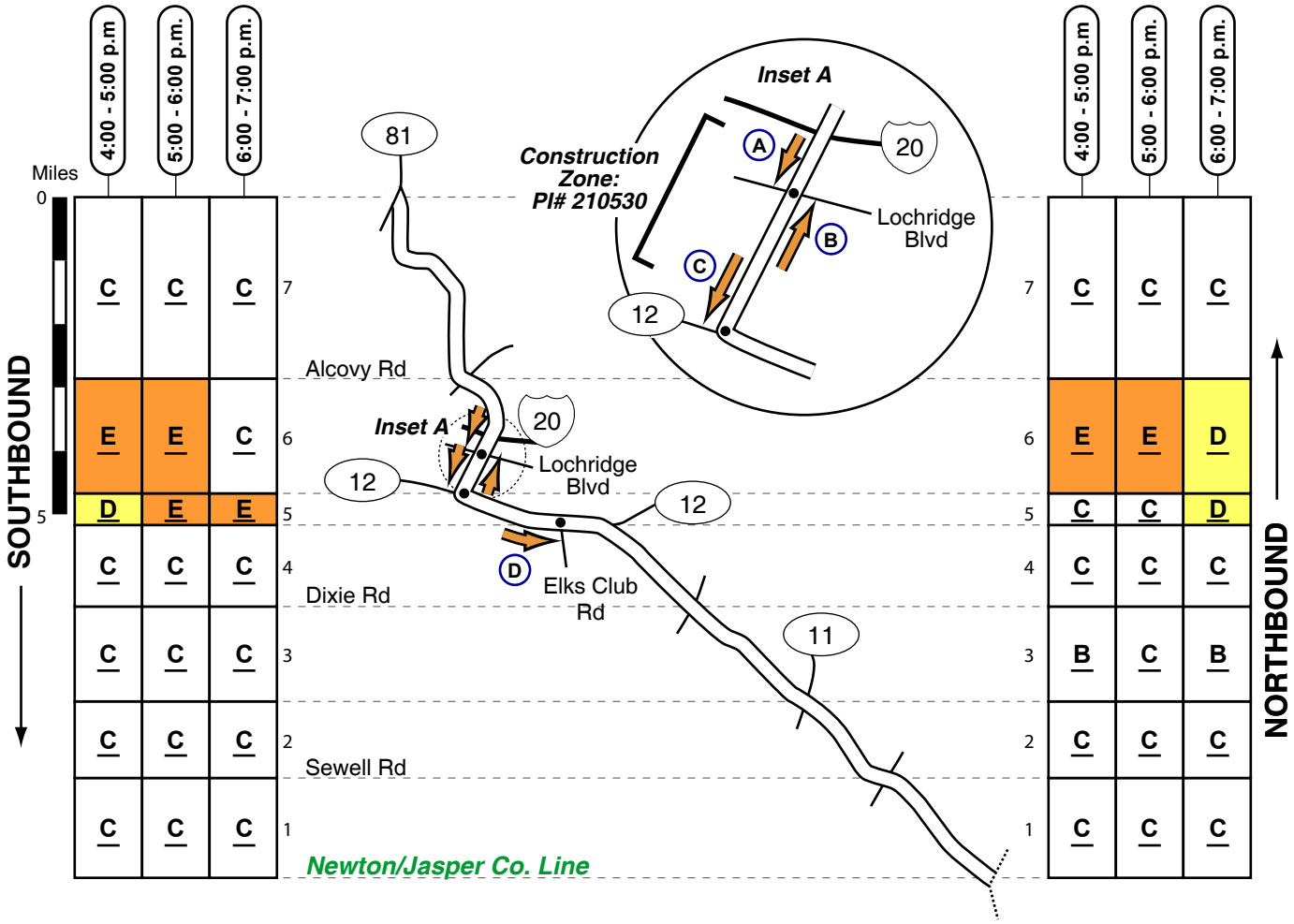


Miles	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
7	C	C	C
6	C	D	D
5	C	C	C
4	C	B	C
3	C	C	C
2	B	B	B
1	B	C	C

Miles	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
7	C	C	C
6	C	D	C
5	D	D	D
4	C	D	C
3	C	C	C
2	B	C	C
1	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 142 (Newton County) - Evening



A
Congestion Type: Mainline Signal Queue
Location: Lochridge Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Ongoing construction at the intersection may have exacerbated the congestion.

B
Congestion Type: Mainline Signal Queue
Location: Lochridge Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Ongoing construction at the intersection may have exacerbated the congestion.

C
Congestion Type: Mainline Signal Queue
Location: SR 12
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

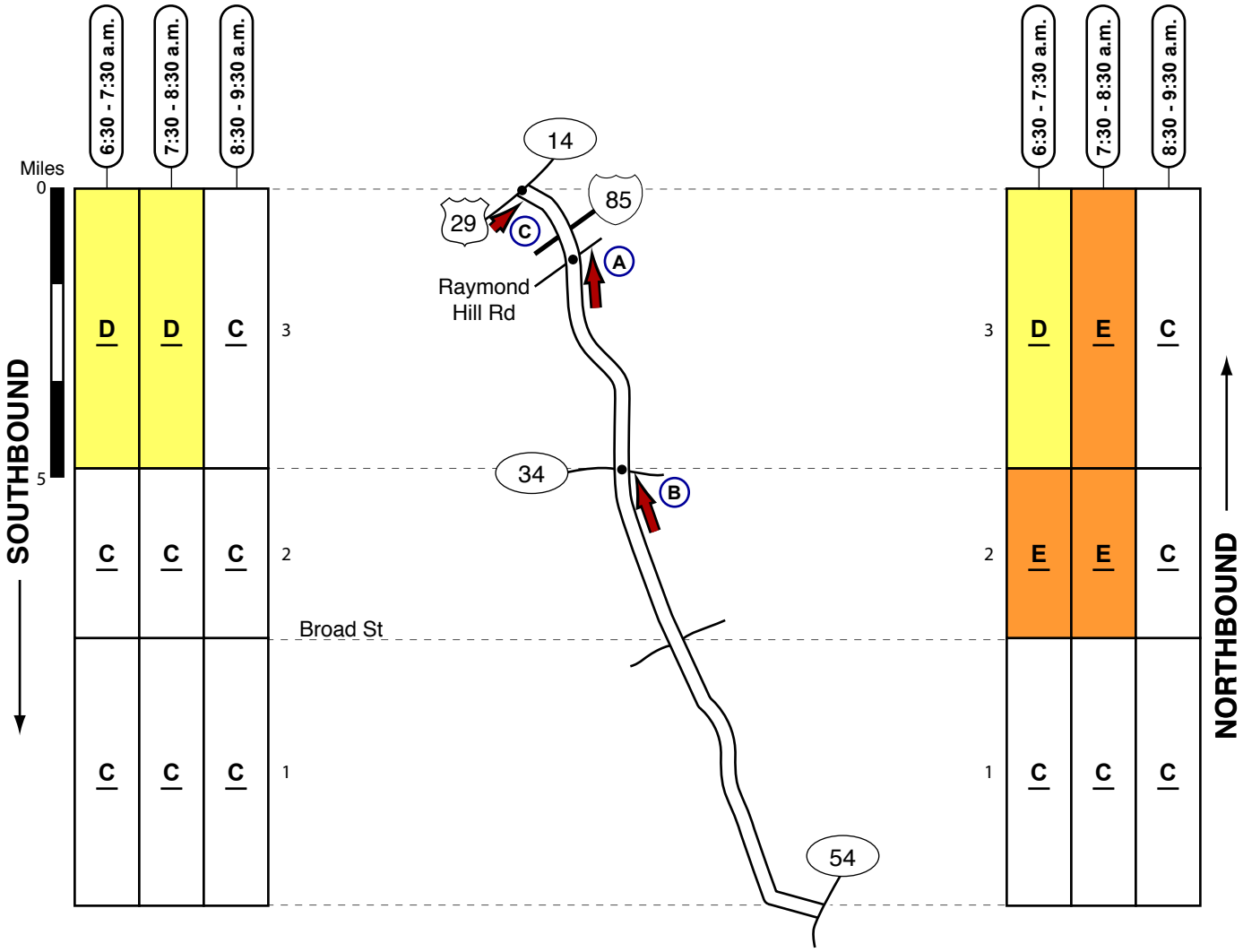
D
Congestion Type: Mainline Signal Queue
Location: Elks Club Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: During one observation (March 18th at 5:41 p.m.), approximately 90 vehicles were queued at the signal.

Construction Zone
PI# 210530
Description: Interchange construction at I-20

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 154 (Coweta County) - Morning



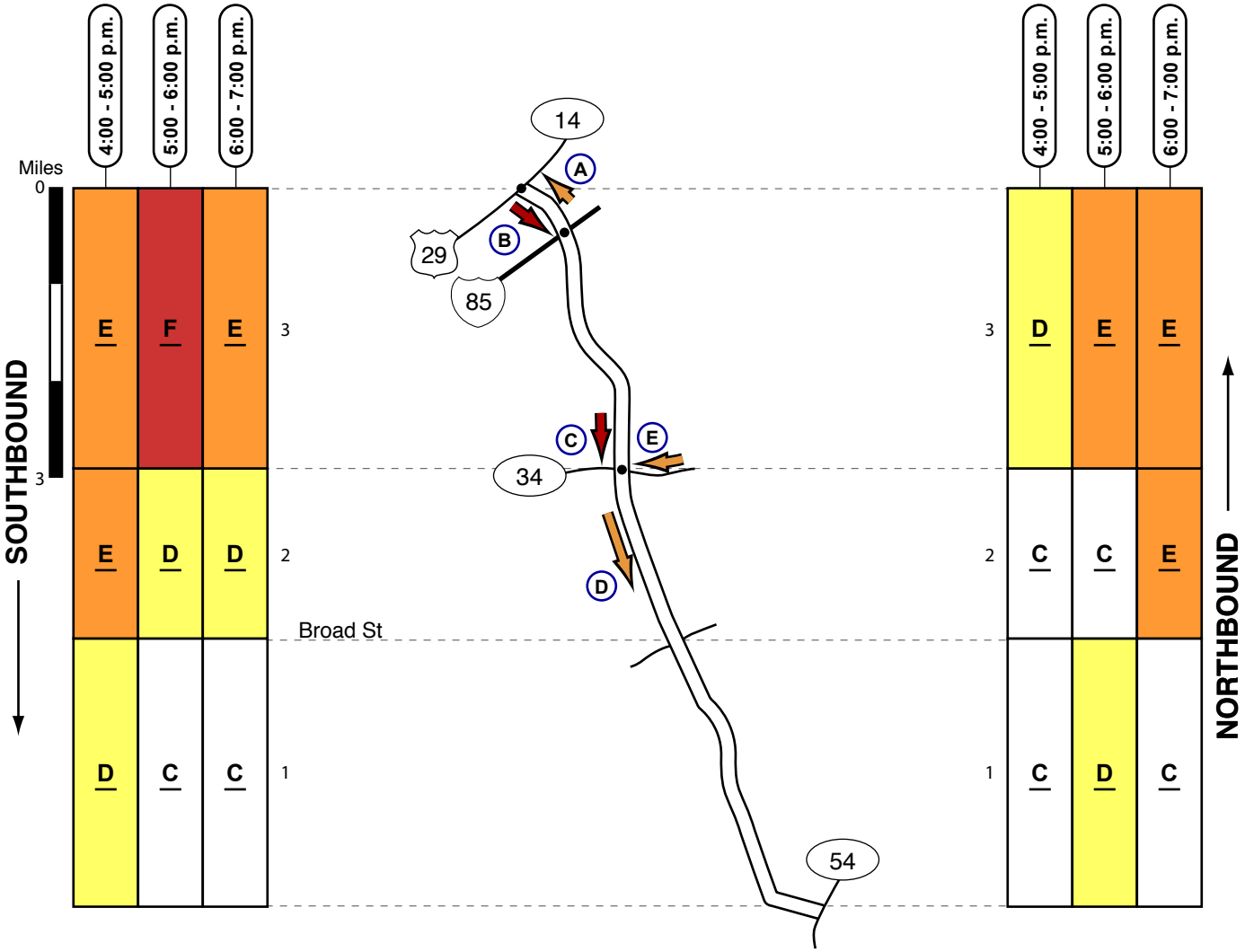
A
Congestion Type: Mainline Signal Queue
Location: Raymond Hill Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 34
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Signal Queue
Location: SR 14
Frequency: Intermittent
Direction: Northbound
Queue Population: 40 to 45 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 154 (Coweta County) - Evening



A
Congestion Type: Mainline Signal Queue
Location: SR 14/US 29
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Most observations
Direction: Southbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 34
Frequency: Peak hour
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

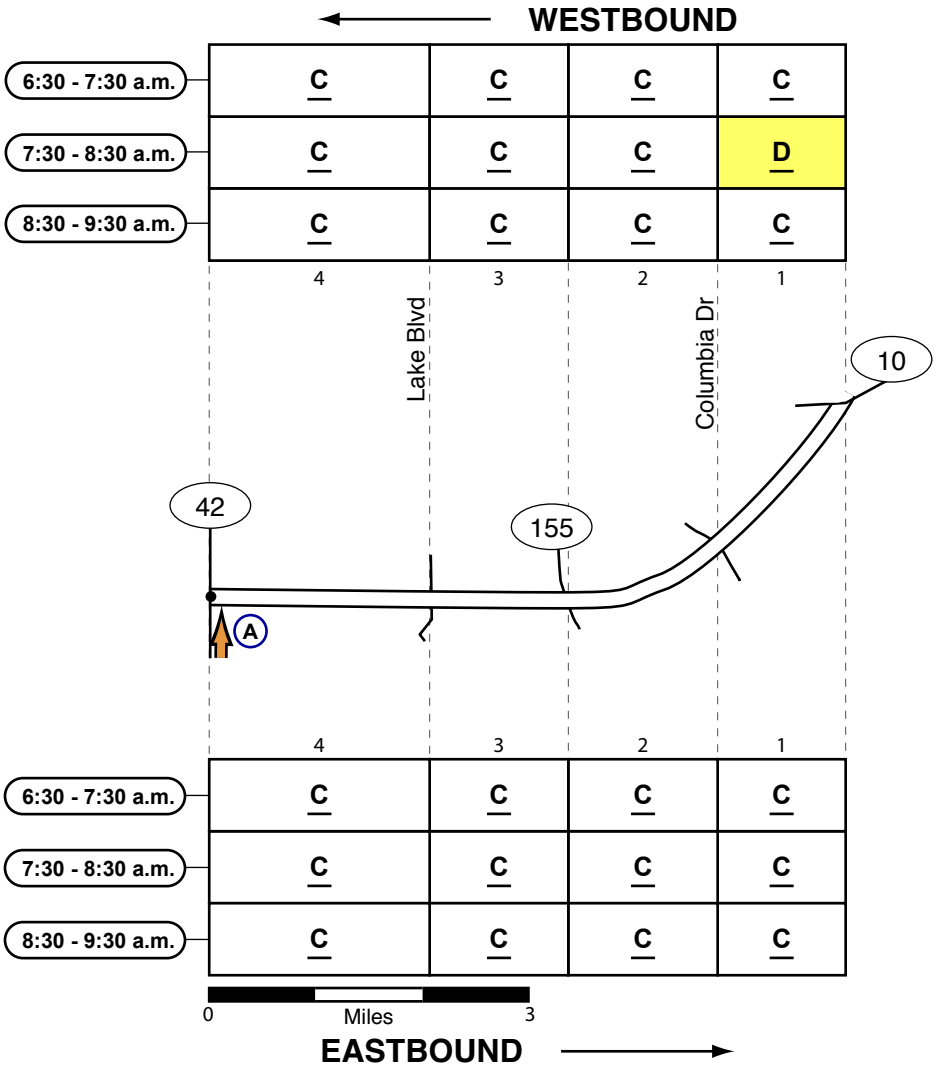
D
Congestion Type: Platoons
Location: Between SR 34 & Broad St
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes:

E
Congestion Type: Cross Road Signal Queue
Location: SR 34
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

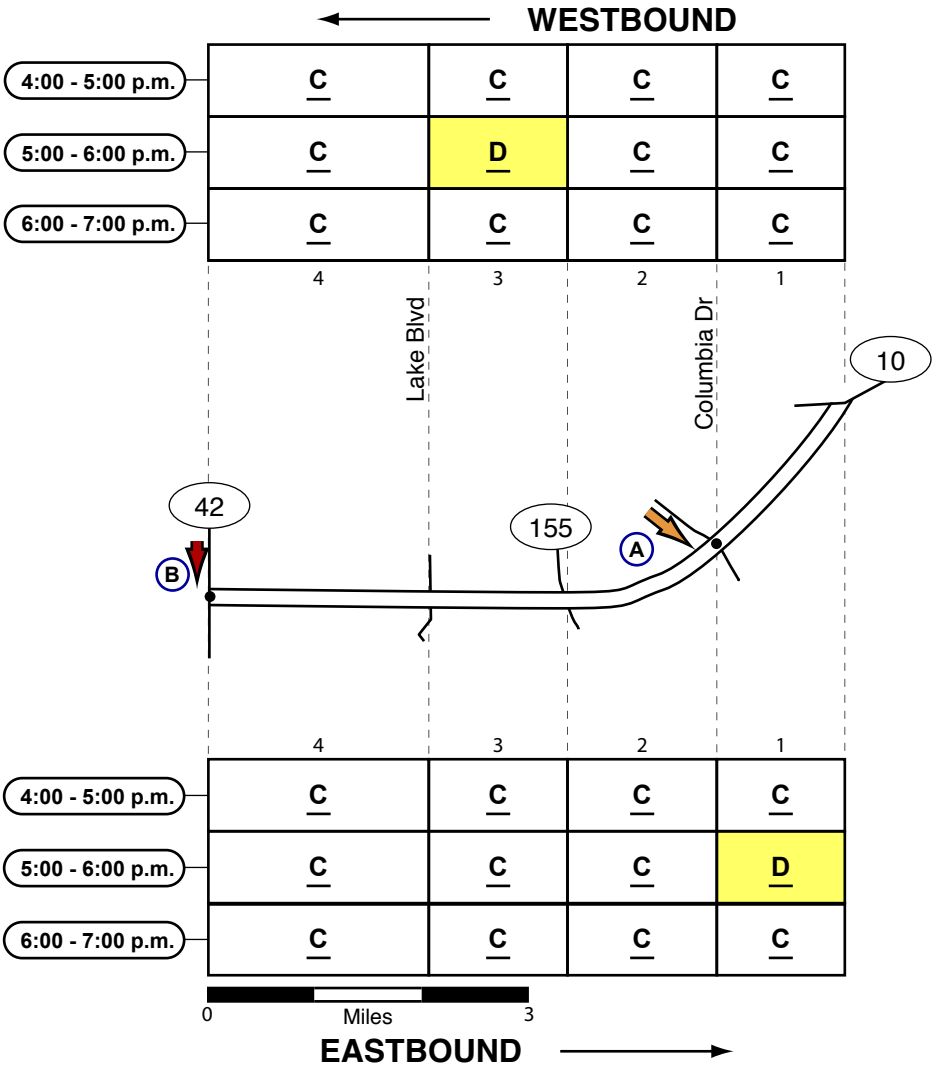
SR 154 (Dekalb County) - Morning



A
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion typically extended back onto the ramp from I-20 (westbound).

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 154 (Dekalb County) - Evening



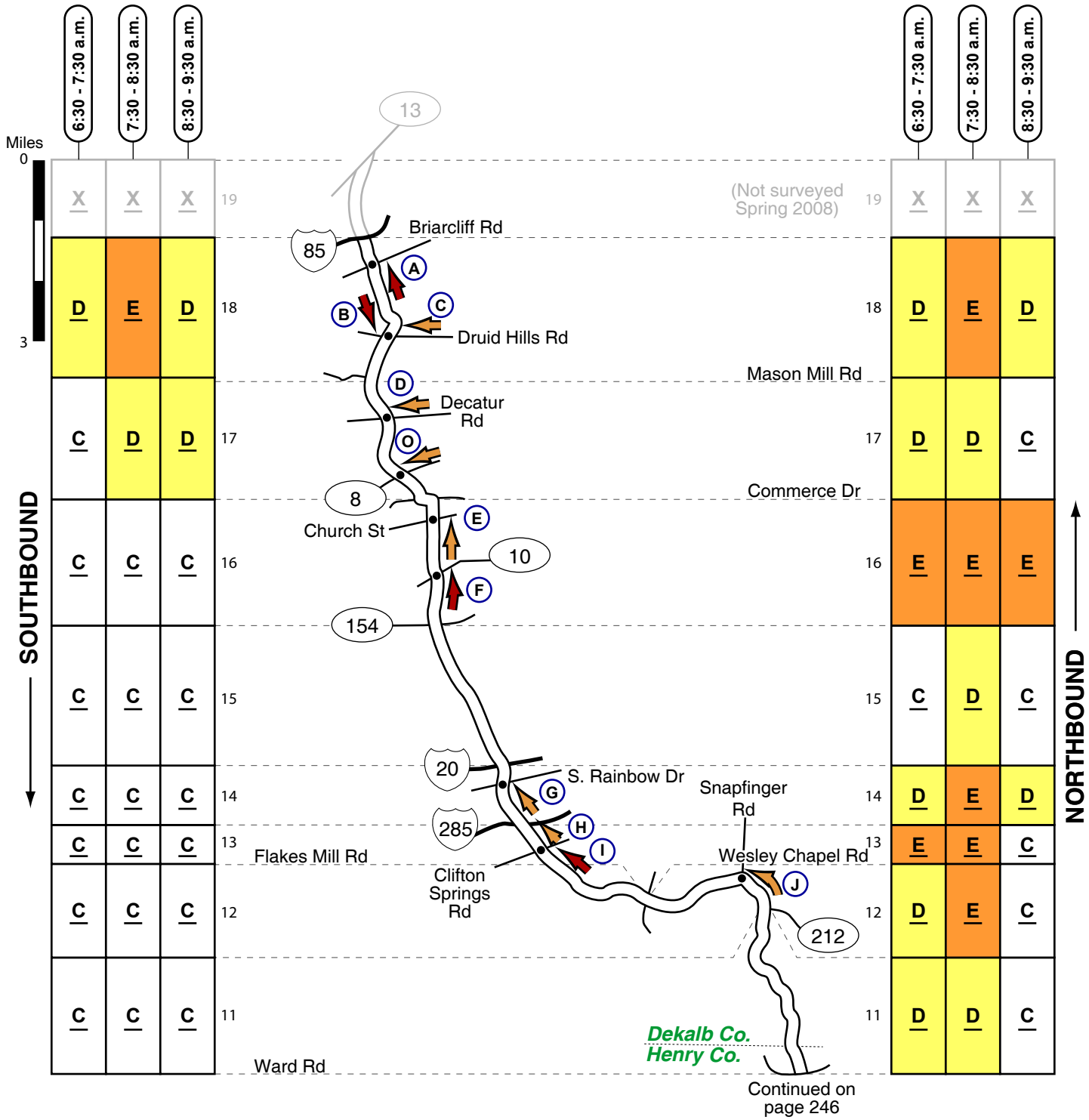
A
Congestion Type: Cross Road Signal Queue
Location: Columbia Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 155 (Dekalb & Henry Counties) - Morning



Mile	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.	Mile	6:30 - 7:30 a.m.	7:30 - 8:30 a.m.	8:30 - 9:30 a.m.
19	X	X	X	19	X	X	X
18	D	E	D	18	D	E	D
17	C	D	D	17	D	D	C
16	C	C	C	16	E	E	E
15	C	C	C	15	C	D	C
14	C	C	C	14	D	E	D
13	C	C	C	13	E	E	C
12	C	C	C	12	D	E	C
11	C	C	C	11	D	D	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 155 (Dekalb & Henry Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Briarcliff Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Druid Hills Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

D
Congestion Type: Cross Road Signal Queue
Location: Decatur Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Church St
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

G
Congestion Type: Mainline Signal Queue
Location: S. Rainbow Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: I-285
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

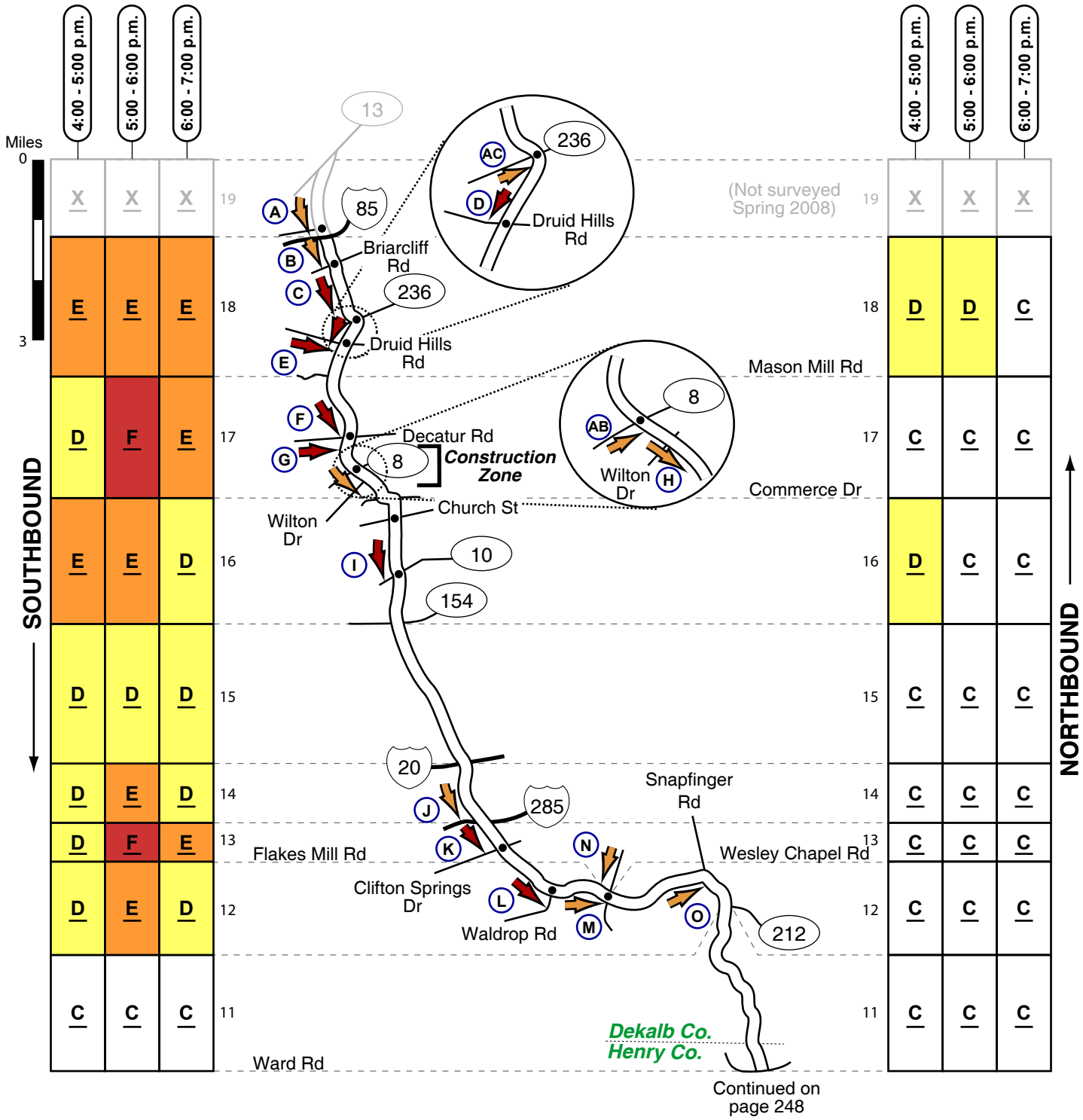
I
Congestion Type: Mainline Signal Queue
Location: Clifton Springs Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Left-Turn Queue/Platoons
Location: Approaching Snapfinger Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2
Note: The head of the queue was found in the left turn lanes at Snapfinger Rd.

O
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Spring 2008

SR 155 (Dekalb & Henry Counties) - Evening



Continued on page 248

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 155 (Dekalb & Henry Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Shopping Center North of I-85
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Briarcliff Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Peak Hour
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 2

D
Congestion Type: Left-Turn Queue
Location: Druid Hills Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: During the peak hour, congestion typically extended back into the left lane of SR 155.

E
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: Most Observations
Direction: Eastbound
Number of Lanes: 2
Note: During the evening survey period, a .5 to 1.5 mile zone of eastbound congestion was found approaching the signal at SR 155; congestion typically extended back through the upstream signal at SR 236.

F
Congestion Type: Mainline Signal Queue
Location: Decatur Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: Congestion typically extended back through the upstream signal at Ladson Ct

G
Congestion Type: Cross Road Signal Queue
Location: Decatur Rd
Frequency: Most Observations
Direction: Eastbound
Number of Lanes: 2
Note: During the evening survey period, a .5 to 1 mile zone of eastbound congestion was found approaching the signal at SR 155.

H
Congestion Type: Platoons
Location: Vicinity of Wilton Dr
Frequency: Intermittent
Direction: Southbound
Platoon Population: 20 to 50 vpl
Number of Lanes: 1
Note: Duirng the evening survey period, platoons were found in the vicinity of Wilton Dr; congestion was casued by ongoing construction (two lanes closed).

I
Congestion Type: Mainline Signal Queue
Location: SR 10
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

J
Congestion Type: Platoons
Location: Between I-20 & I-285
Frequency: Peak Hour
Direction: Southbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

K
Congestion Type: Mainline Signal Queue
Location: Clifton Springs Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

L
Congestion Type: Mainline Signal Queue
Location: Waldrop Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 90 vpl
Number of Lanes: 2

M
Congestion Type: Mainline Signal Queue
Location: Wesley Chapel Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

N
Congestion Type: Cross Road Signal Queue
Location: Wesley Chapel Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

O
Congestion Type: Right-Turn Queue/Platoons
Location: Snapfinger Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

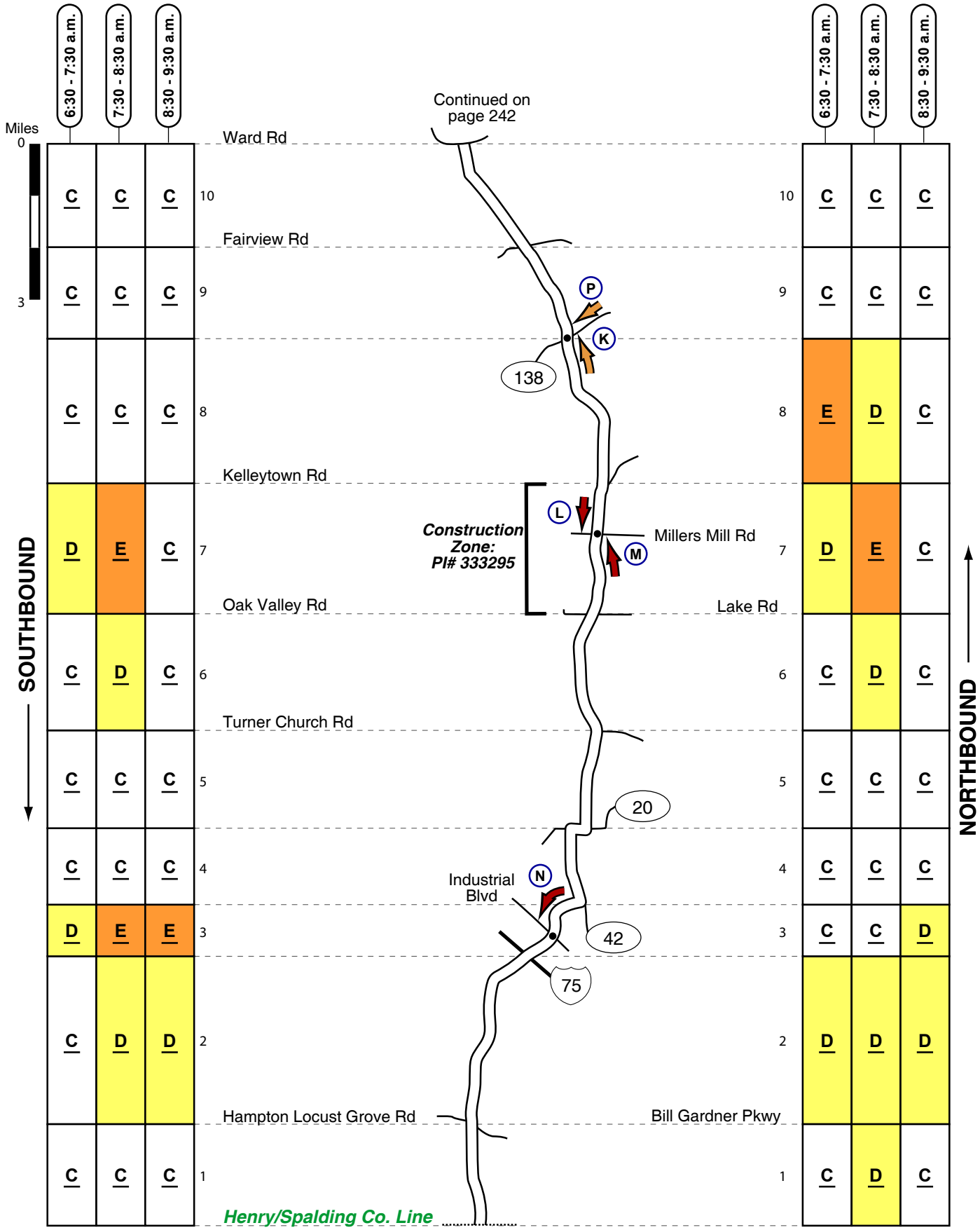
AB
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

AC
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

Construction Zone
Location: SR 155 at Wilton Dr
Description: Short Term Construction

Spring 2008

SR 155 (Dekalb & Henry Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 155 (Dekalb & Henry Counties) - Morning

K
Congestion Type: Mainline Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

L
Congestion Type: Mainline Signal Queue
Location: Millers Mill Rd
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: Congestion appeared to be exacerbated by ongoing construction at Millers Mill Rd.

M
Congestion Type: Mainline Signal Queue
Location: Millers Mill Rd
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: Congestion appeared to be exacerbated by ongoing construction at Millers Mill Rd.

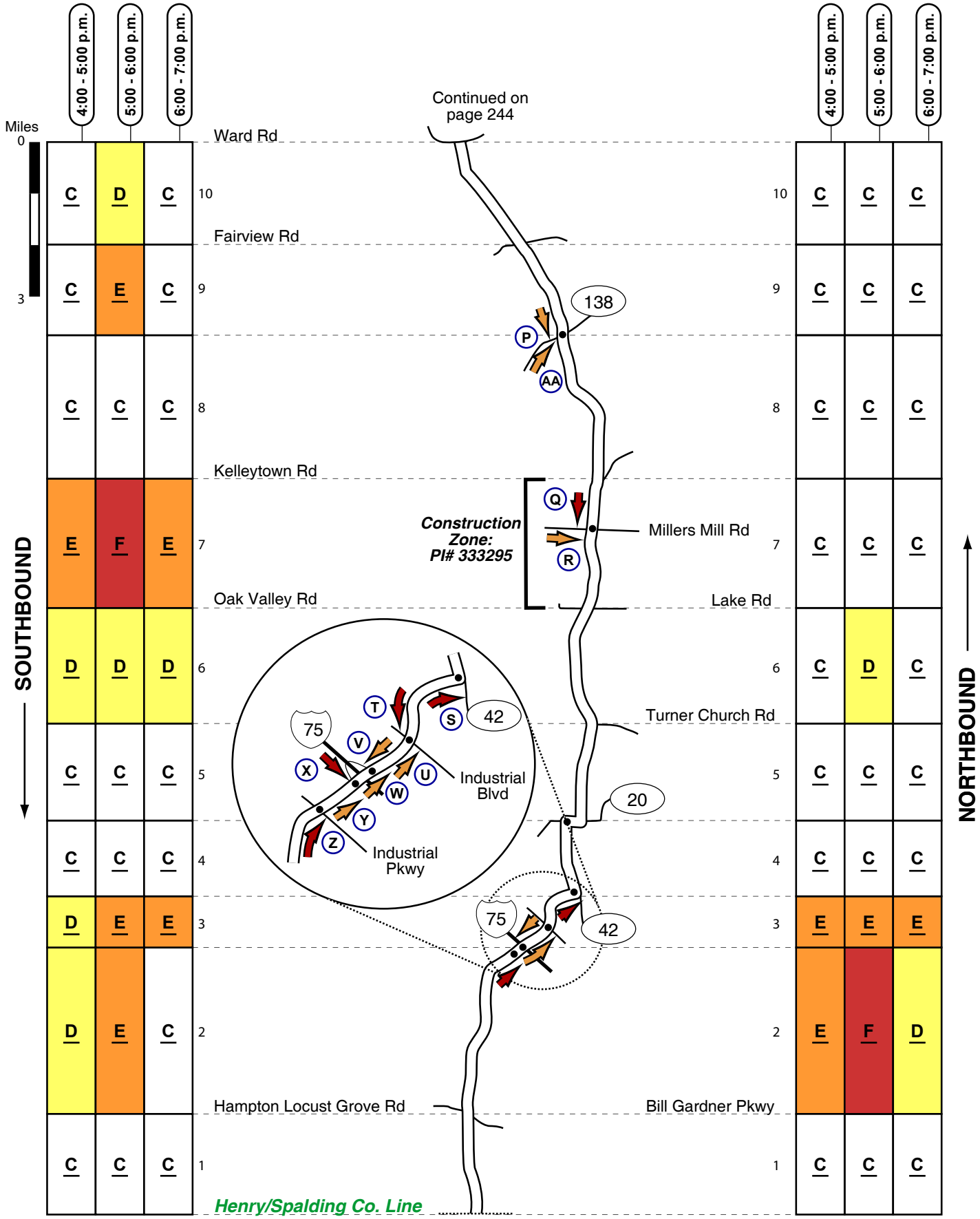
N
Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

P
Congestion Type: Cross Road Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Construction Zone
PI# 333295
Description: Roadway Widening

Spring 2008

SR 155 (Dekalb & Henry Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 155 (Dekalb & Henry Counties) - Evening

P
Congestion Type: Mainline Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Q
Congestion Type: Mainline Signal Queue
Location: Millers Mill Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1
Note: Congestion appeared to be exacerbated by ongoing construction at Millers Mill Rd.

R
Congestion Type: Cross Road Signal Queue
Location: Millers Mill Rd
Frequency: One day only
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Congestion appeared to be exacerbated by ongoing construction.

S
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Peak hour
Direction: Northbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1

T
Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

U
Congestion Type: Mainline Signal Queue
Location: Industrial Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

V
Congestion Type: Mainline Signal Queue
Location: I-75 Northbound Ramps
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

W
Congestion Type: Mainline Signal Queue
Location: I-75 Northbound Ramps
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

X
Congestion Type: Mainline Signal Queue
Location: I-75 Southbound Ramps
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Y
Congestion Type: Mainline Signal Queue
Location: I-75 Southbound Ramps
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

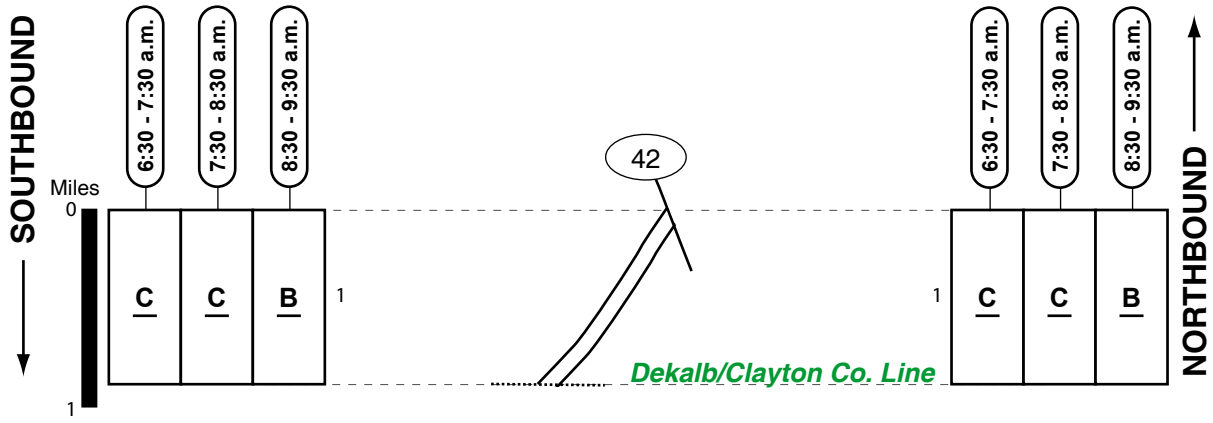
Z
Congestion Type: Mainline Signal Queue
Location: Industrial Parkway
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1
Note: On one day only, one to two-mile zone of congesiton was found approaching the signal at Industrial Parkway; vehicles on the shoulder may have contributed to the congestion.

AA
Congestion Type: Cross Road Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Construction Zone
PI# 333295
Description: Roadway Widening

Spring 2008

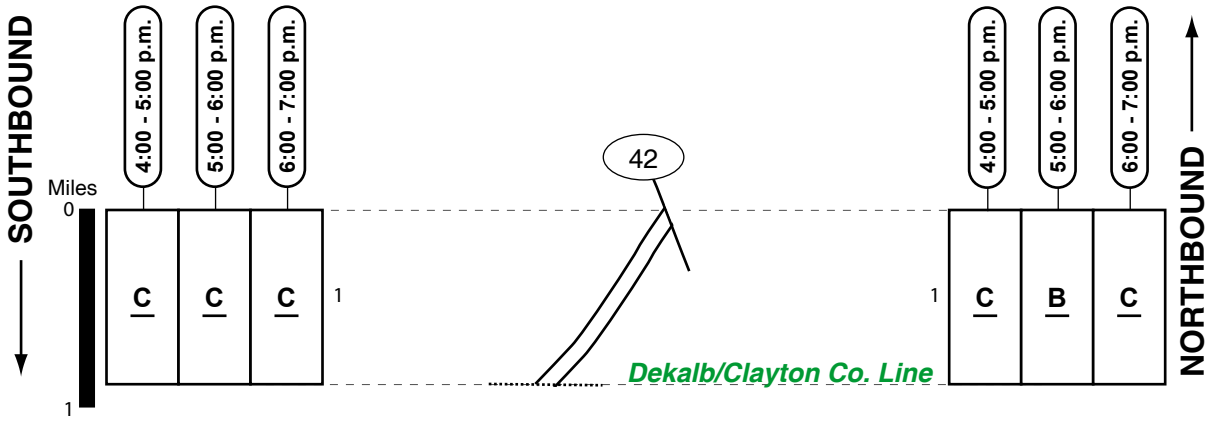
SR 160 (Dekalb County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

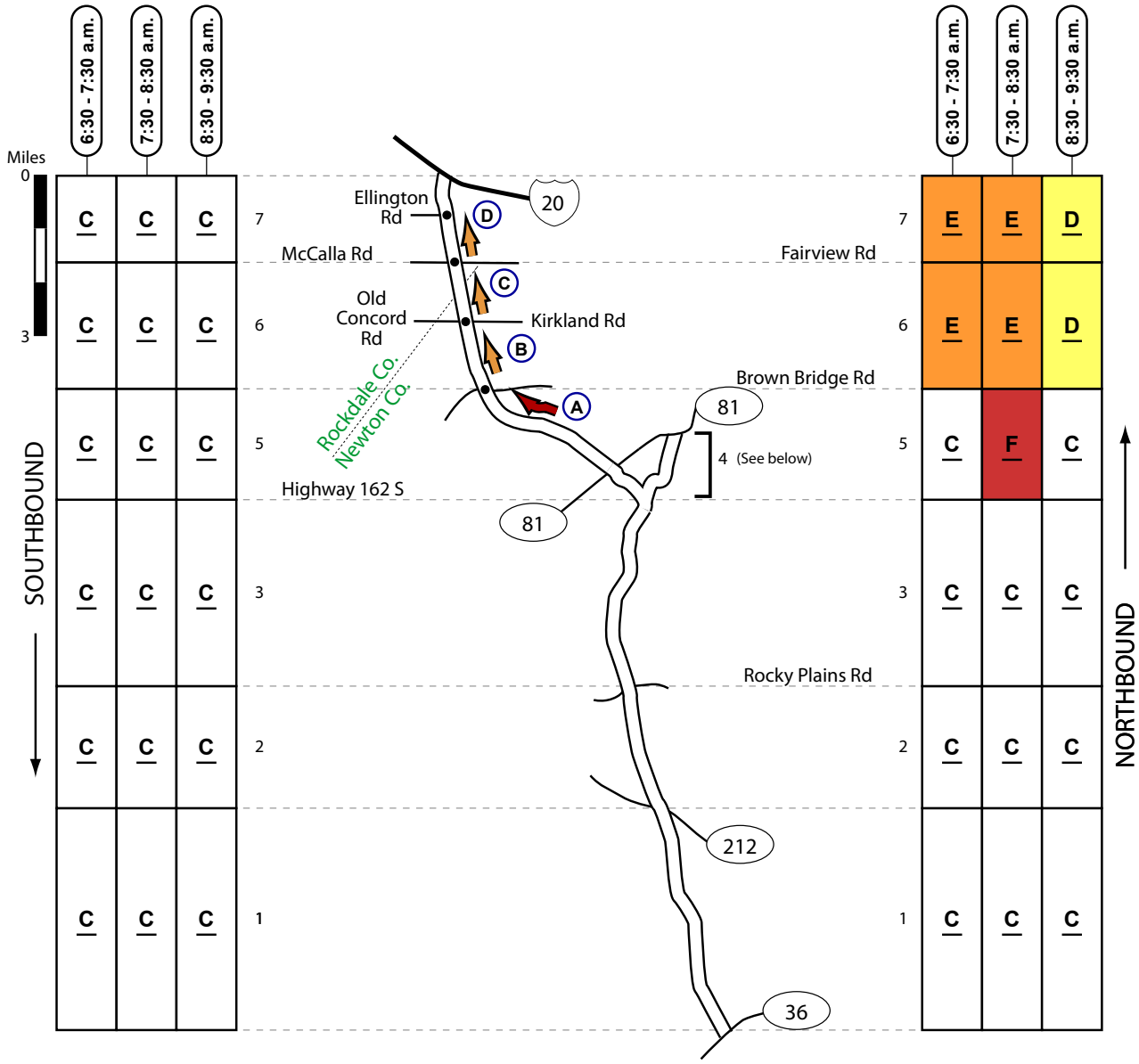
SR 160 (Dekalb County) - Evening

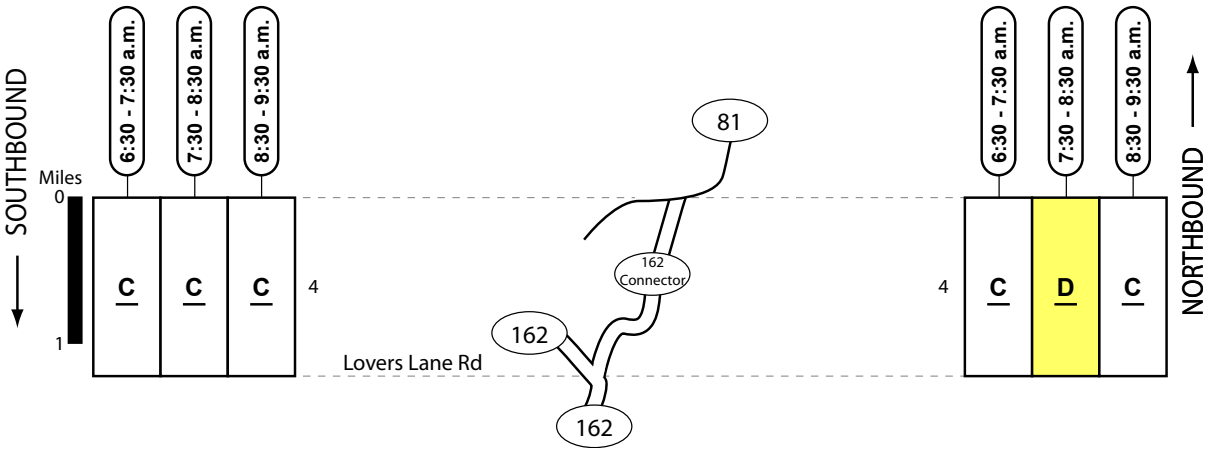


Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 162 (Rockdale & Newton Counties) - Morning





Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 162 (Rockdale & Newton Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Brown Bridge Rd
Frequency: On some days but not others
Direction: Northbound
Queue Population: 70 to 90 vpl
Number of Lanes: 1

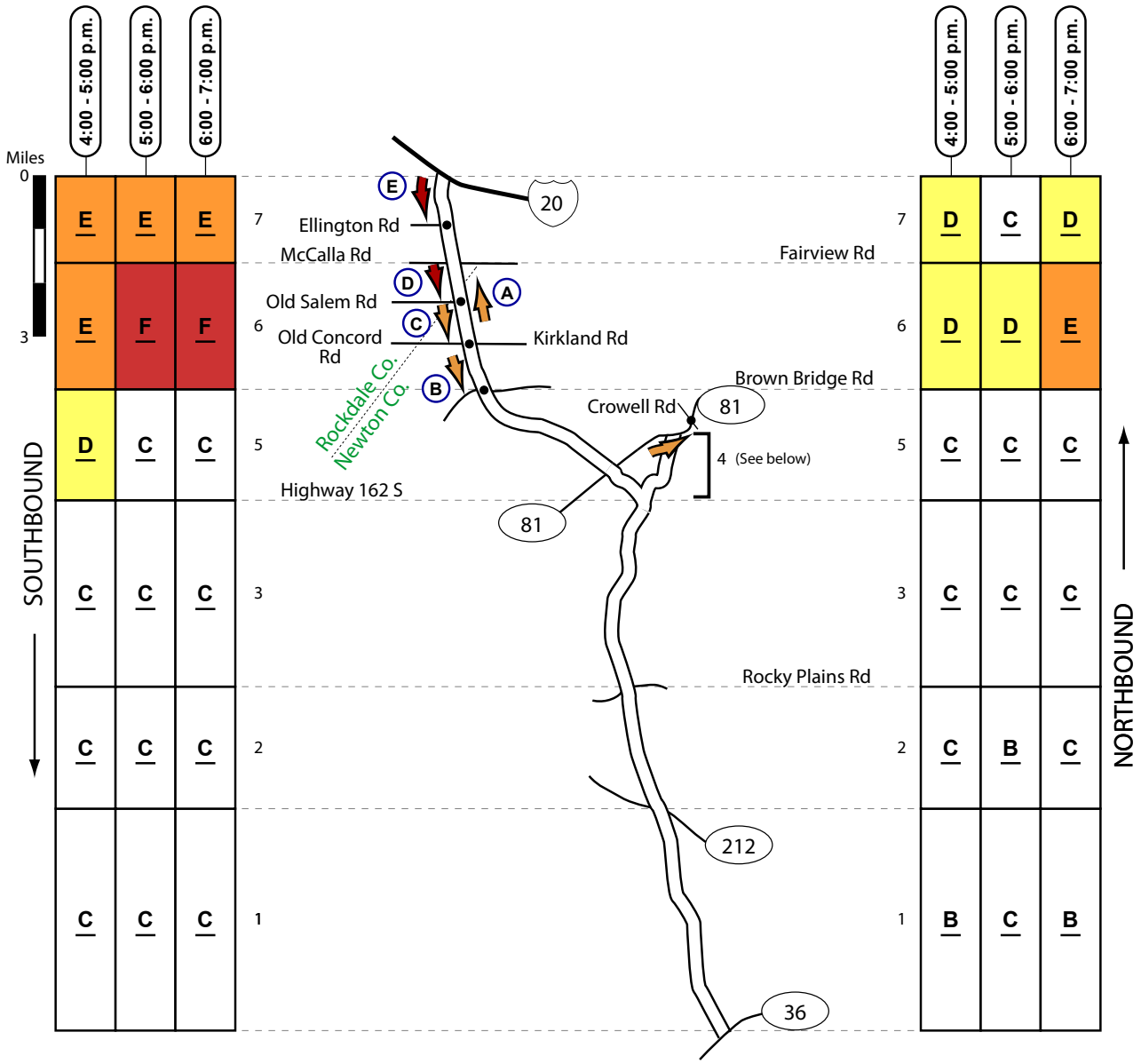
B
Congestion Type: Mainline Signal Queue/ Platoons
Location: Kirkland Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

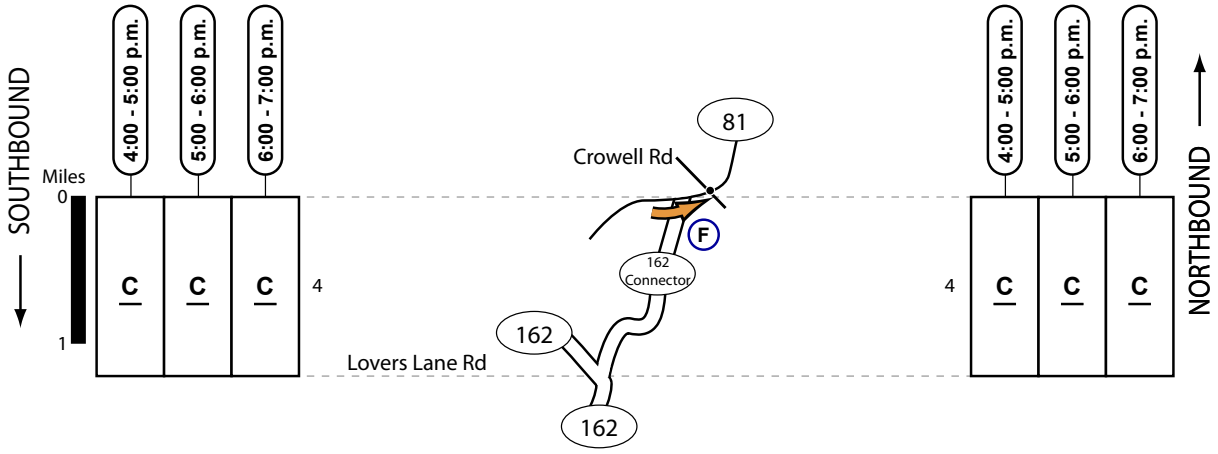
C
Congestion Type: Mainline Signal Queue/ Platoons
Location: McCalla Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Ellington Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 162 (Rockdale & Newton Counties) - Evening





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 162 (Rockdale & Newton Counties) - Evening

A
Congestion Type: Platoons
Location: Between Brown Bridge Rd & Fairview Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Brown Bridge Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Kirkland Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

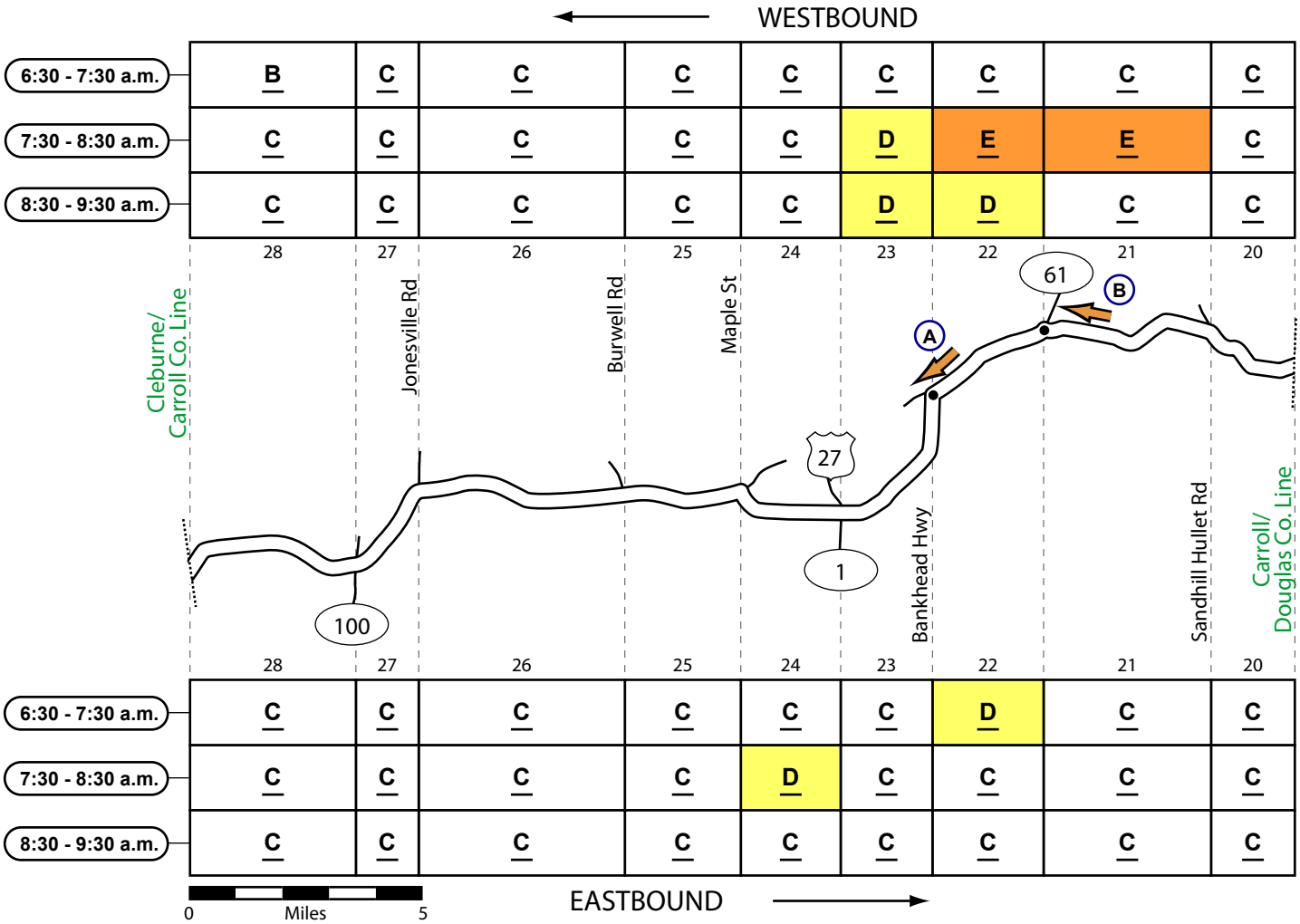
D
Congestion Type: Mainline Signal Queue
Location: Old Salem Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: Ellington Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: Crowell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 166 (Carroll County) - Morning

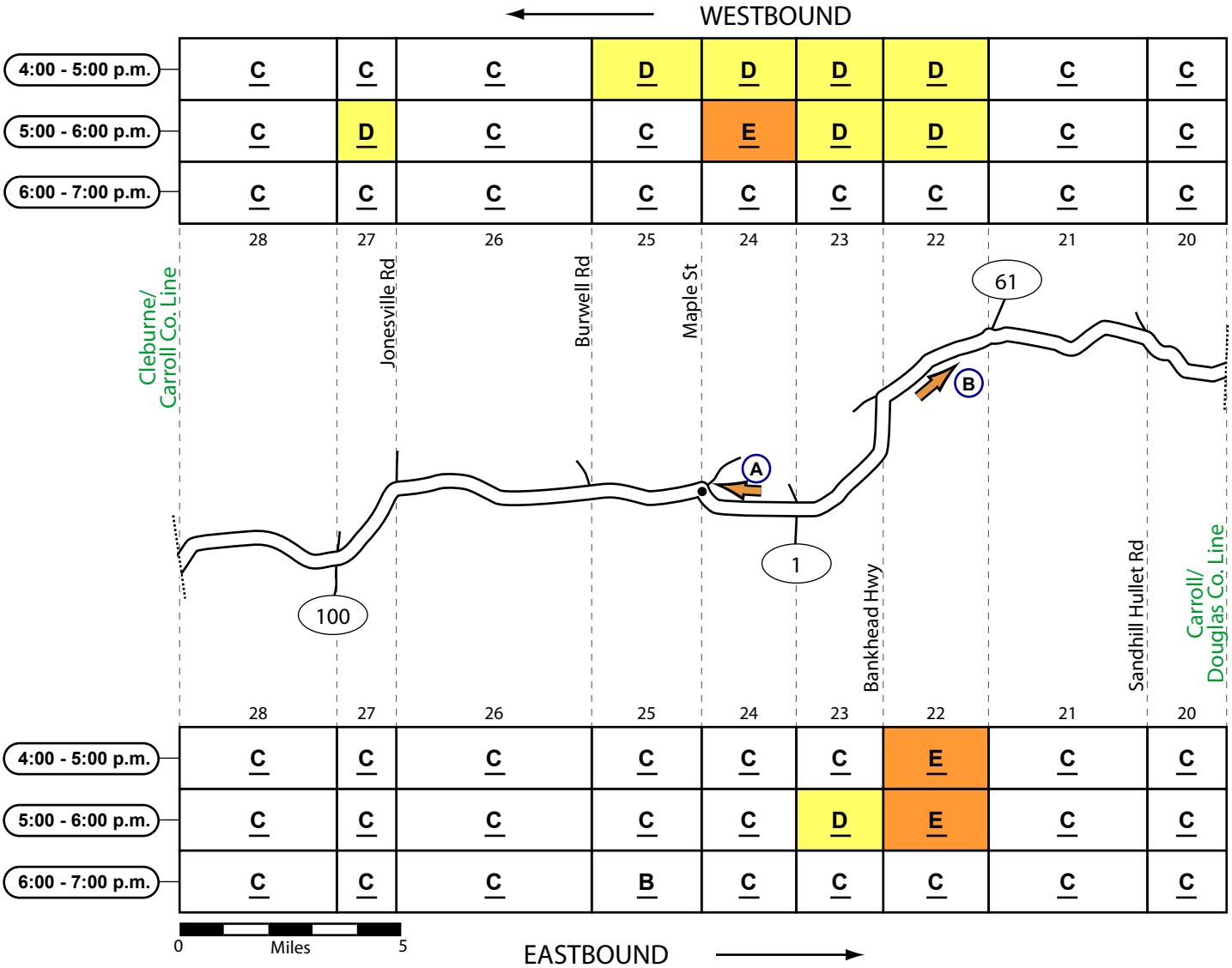


A
Congestion Type: Mainline Signal Queue
Location: Bankhead Hwy
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 61
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 166 (Carroll County) - Evening



A
Congestion Type: Left-Turn Queue/Platoons
Location: Maple St.
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 40 vpl
Number of Lanes: 1

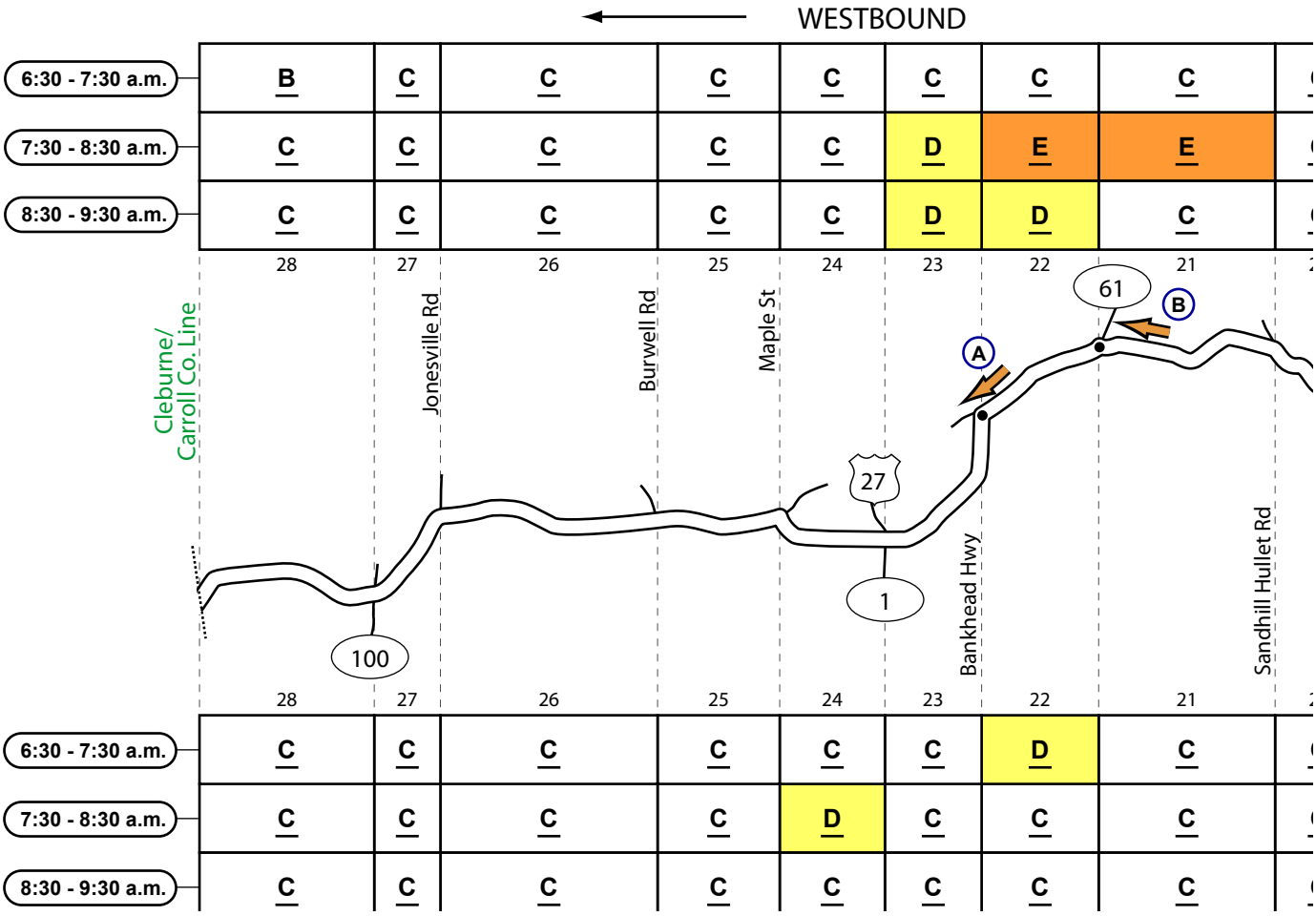
B
Congestion Type: Platoons
Location: Between Bankhead Highway & SR 61
Frequency: Most observations before 6:00 p.m.
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 166 (Fulton County) - Morning

SR 166 (Carroll County)
Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 166 (Fulton County) - Morning

A
Congestion Type: Platoons
Location: Between Camp Creek Pkwy & Enon Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 1
Note: Vehicles waiting to turn left at Boat Rock Rd (no signal - waiting for gap in westbound traffic) may have contributed to the formation of the platoons.

B
Congestion Type: Signal Queue
Location: County Line Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Signal Queue
Location: Niskey Lake Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 1

D
Congestion Type: Signal Queue
Location: Fairburn Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: Barge Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

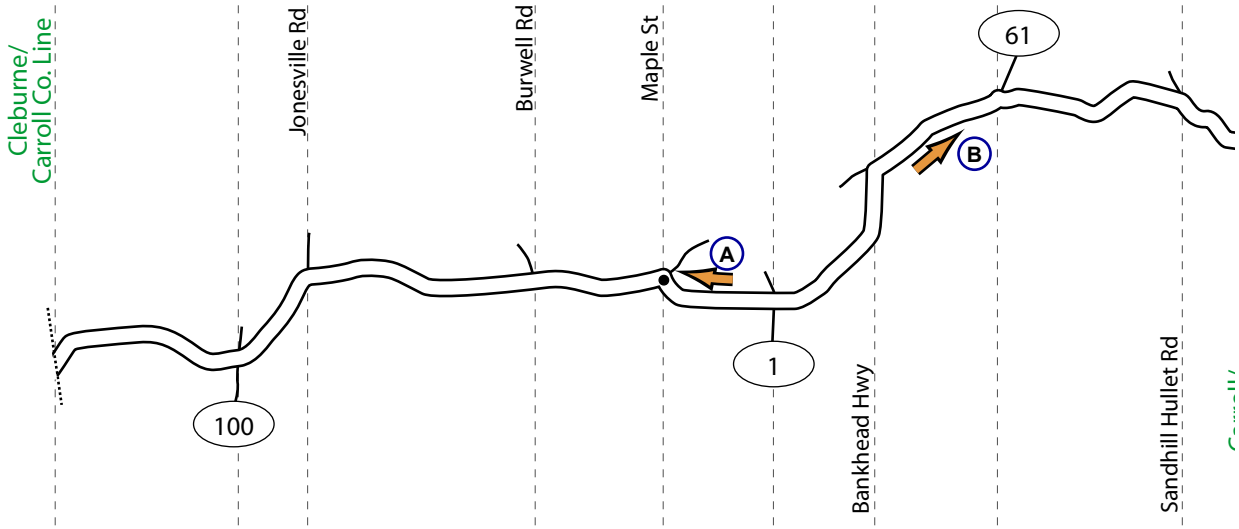
Fall 2007

SR 166 (Fulton County) - Evening

SR 166 (Carroll County)
Evening

WESTBOUND

	28	27	26	25	24	23	22	21	20
4:00 - 5:00 p.m.	C	C	C	D	D	D	D	C	C
5:00 - 6:00 p.m.	C	D	C	C	E	D	D	C	C
6:00 - 7:00 p.m.	C	C	C	C	C	C	C	C	C



	28	27	26	25	24	23	22	21	20
4:00 - 5:00 p.m.	C	C	C	C	C	C	E	C	C
5:00 - 6:00 p.m.	C	C	C	C	C	D	E	C	C
6:00 - 7:00 p.m.	C	C	C	B	C	C	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

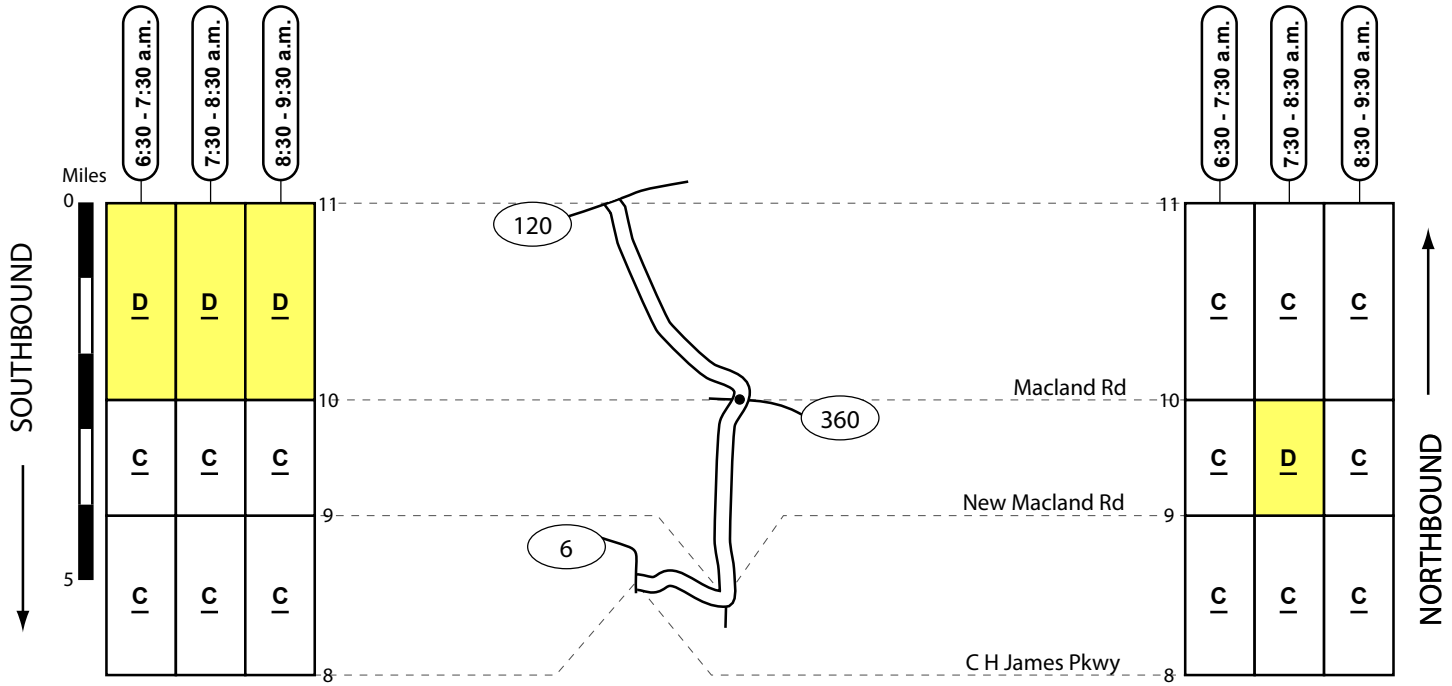
SR 166 (Fulton County) - Evening

A
Congestion Type: Signal Queue
Location: Fairburn Rd
Frequency: Peak Hour
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: During one observation, eastbound congestion approaching Fairburn Rd extended back through the upstream signal at Barge Rd.

B
Congestion Type: Signal Queue
Location: Niskey Lake Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

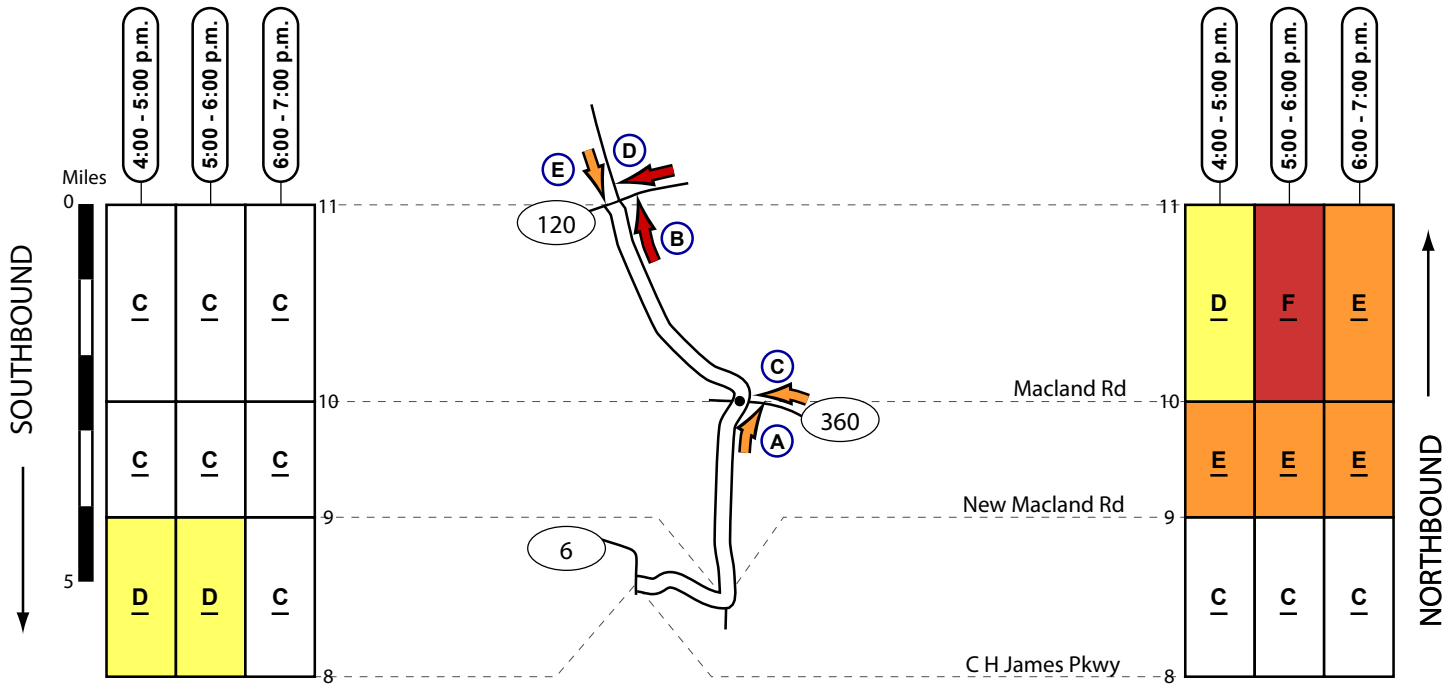
Fall 2007

SR 176 (Cobb County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007
SR 176 (Cobb County) - Evening



A
Congestion Type: Signal Queue
Location: SR 360 (Macland Rd)
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 1

B
Congestion Type: Signal Queue
Location: SR 120
Frequency: Most observations
Direction: Northbound
Queue Populations: 25 to 65 vpl
Number of Lanes: 1

C
Congestion Type: Congested Cross Road
Location: SR 360 (Macland Rd)
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

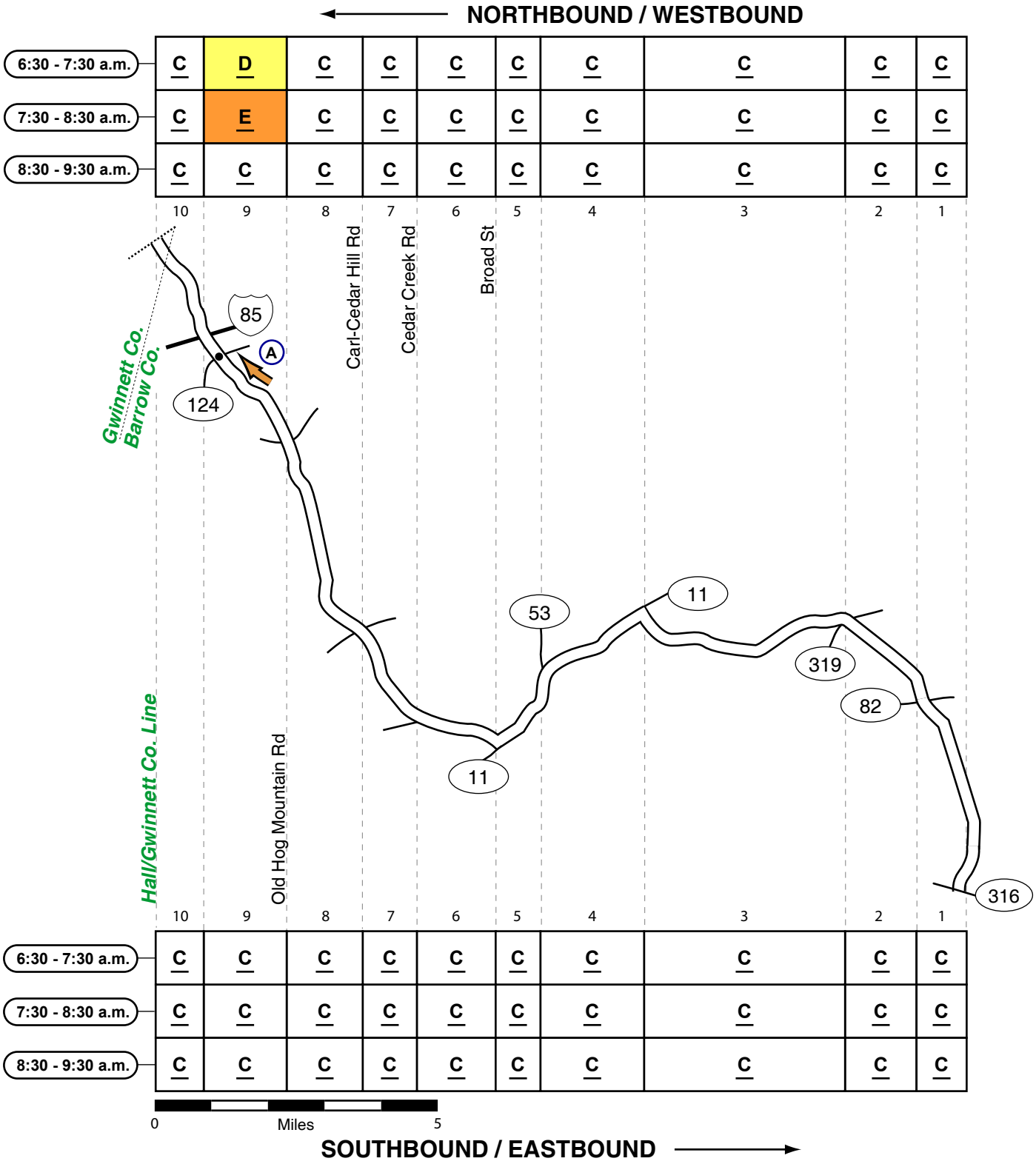
D
Congestion Type: Congested Cross Road
Location: SR 120
Frequency: Most observations (peak hour)
Direction: Westbound
Queue Populations: 25 to 60 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: SR 120
Frequency: Intermittent
Direction: Southbound
Queue Populations: 25 to 60 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 211 (Barrow County) - Morning

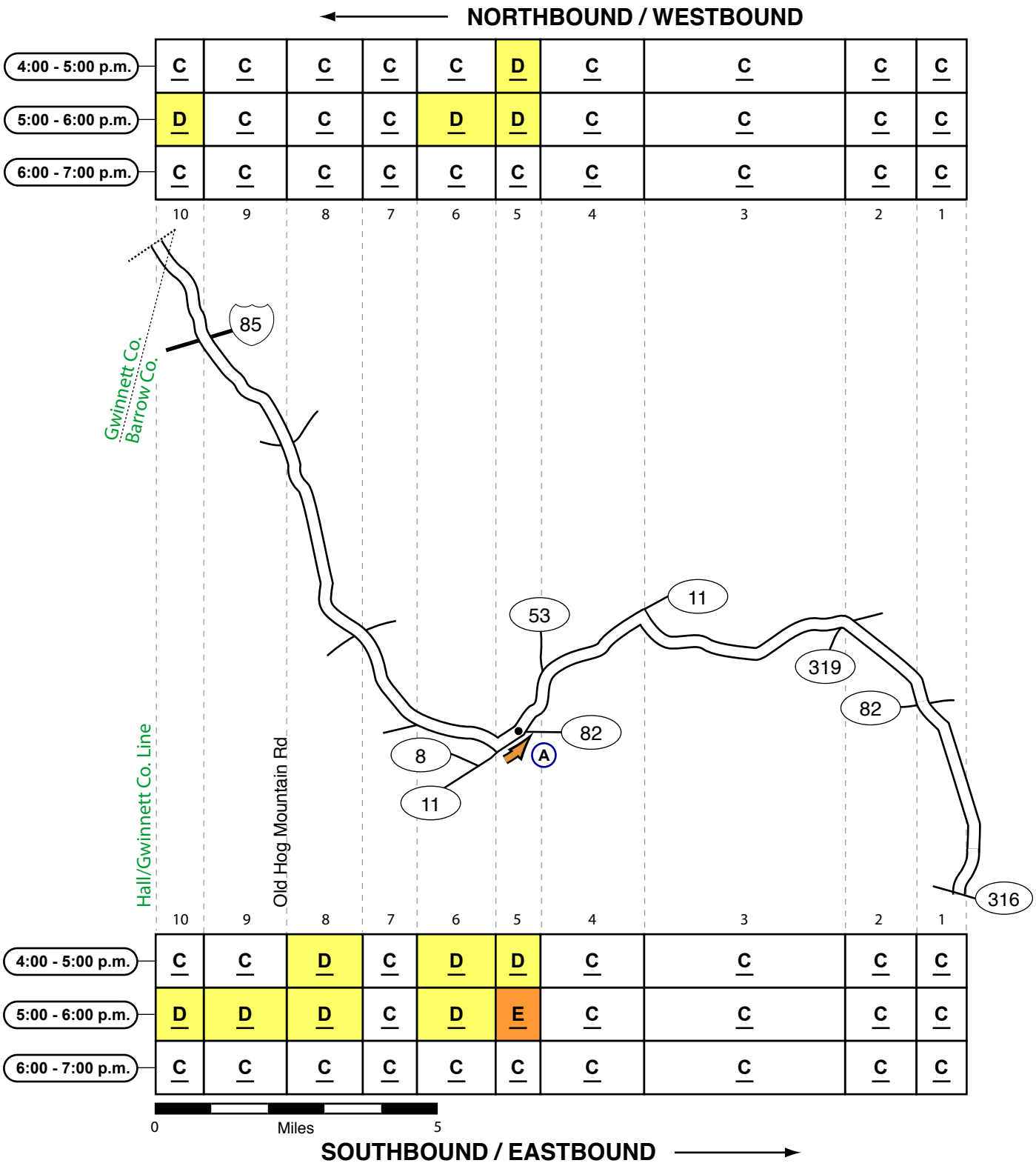


A
Congestion Type: Mainline Signal Queue
Location: SR 124
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 211 (Barrow County) - Evening

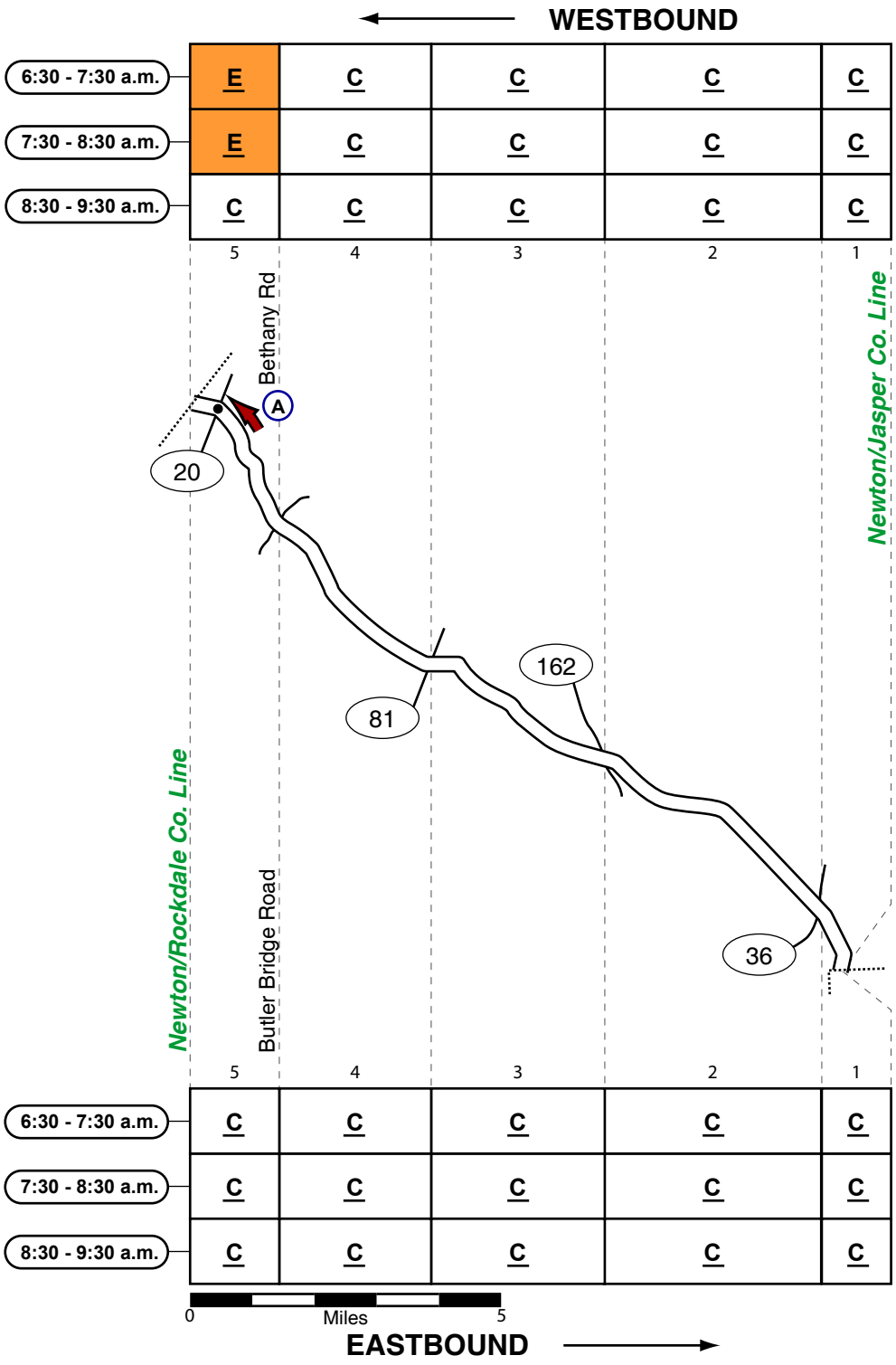


A
Congestion Type: Mainline Signal Queue/Platoons
Location: SR 82
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

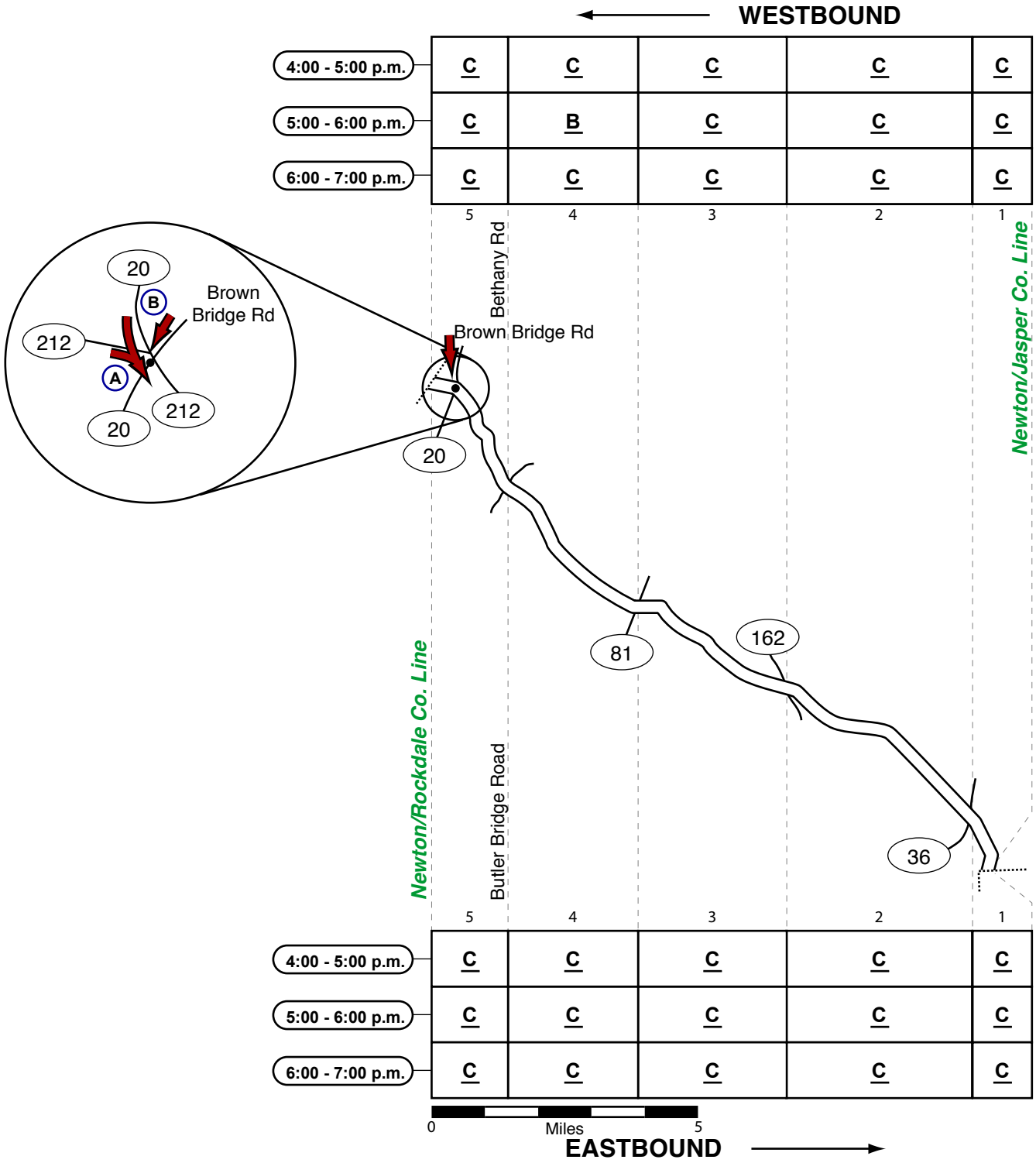
SR 212 (Newton County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: SR 20
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 212 (Newton County) - Evening



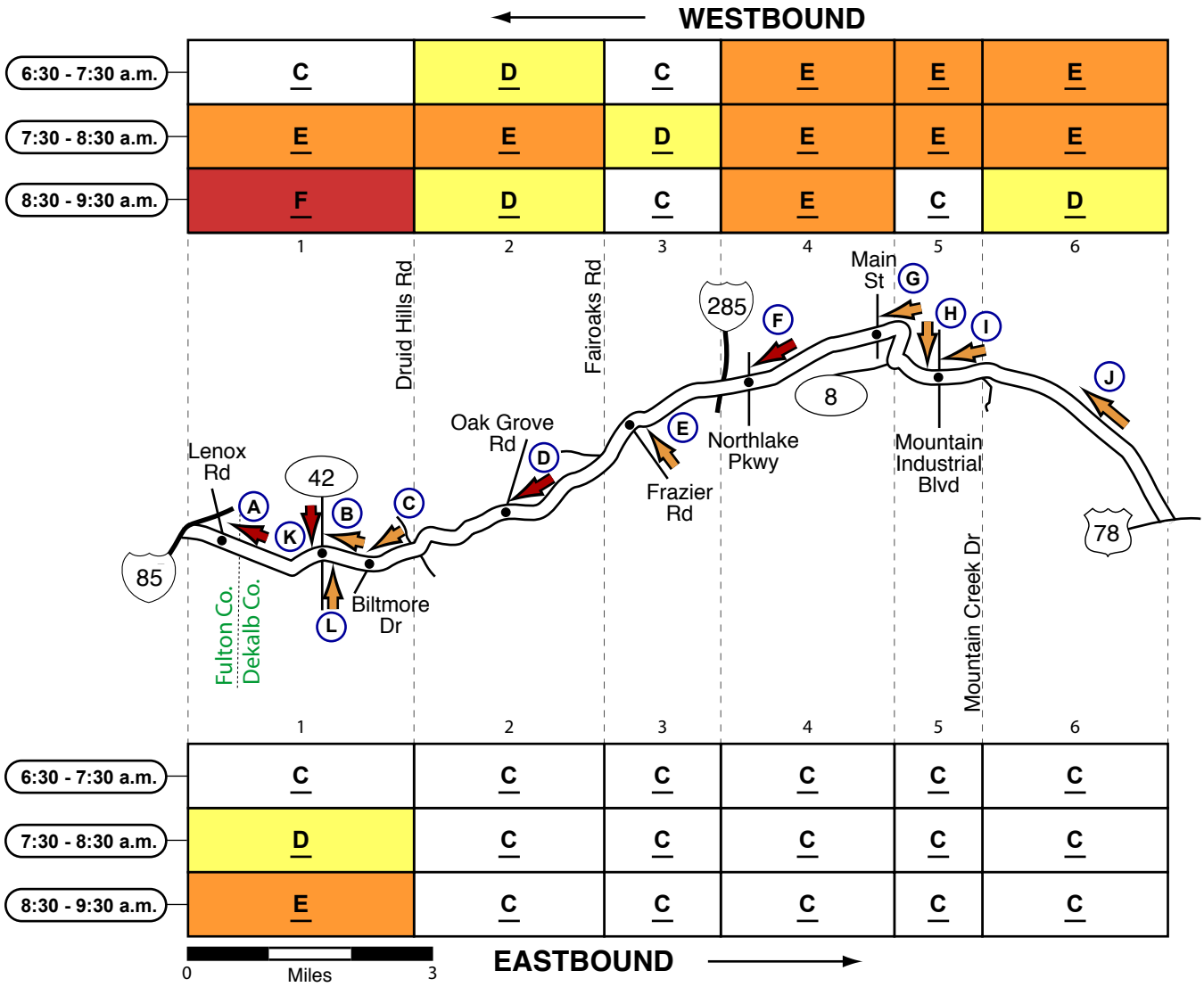
A
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion on SR 212 typically extended back on to SR 20.

B
Congestion Type: Cross Road Signal Queue
Location: Brown Bridge Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 236 (Fulton & Dekalb Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 236 (Fulton & Dekalb Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Most observations between 7:30 and 9:00 a.m.
Direction: Westbound
Queue Population: 35 to 85 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Biltmore Dr
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Oak Grove Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Frazier Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Northlake Parkway
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Main St
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Cross Road Signal Queue
Location: Mountain Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: Mountain Industrial Blvd
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 30 vpl
Number of Lanes: 2

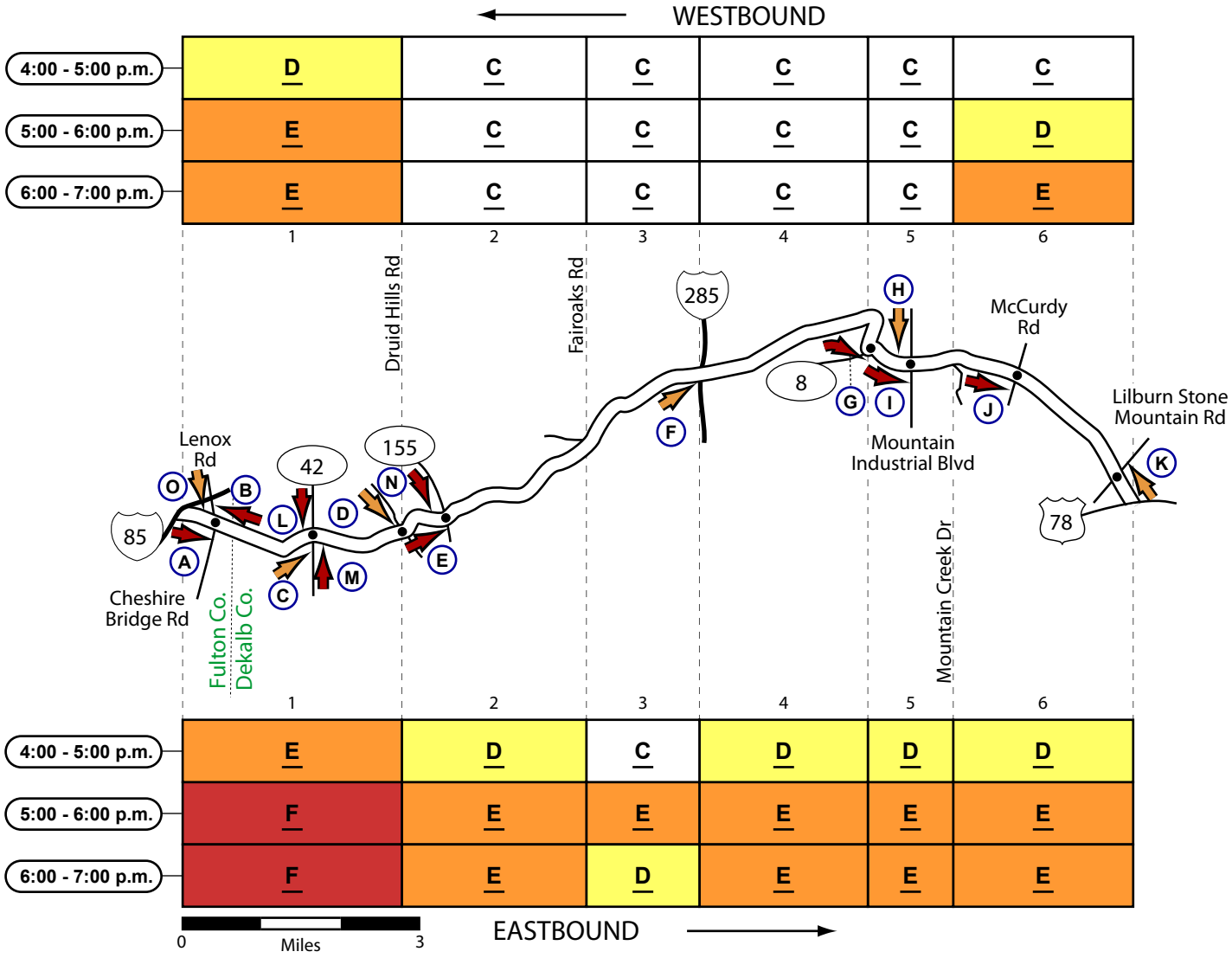
J
Congestion Type: Platoons
Location: Between US 78 & Mountain Creek Dr
Frequency: Most observations before 8:30 a.m.
Direction: Westbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 2

K
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 90 vpl
Number of Lanes: 1

L
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Northbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 236 (Fulton & Dekalb Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 236 (Fulton & Dekalb Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Lenox Rd/Cheshire Bridge Rd
Frequency: Most observations after 5:30 p.m.
Direction: Westbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: Druid Hills Rd
Frequency: On some days but not others
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: SR 155
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

F
Congestion Type: Platoons
Location: Approaching I-285
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 45 vpl
Number of Lanes: 3

G
Congestion Type: Left-Turn Queue
Location: SR 8
Frequency: On some days but not others
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: The head of the queue was found in the two left-turn lanes at SR 8; congestion typically extended back into the mainline of SR 236.

H
Congestion Type: Cross Road Signal Queue
Location: Mountain Industrial Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

I
Congestion Type: Mainline Signal Queue
Location: Mountain Industrial Blvd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 30 to 60 vpl
Number of Lanes: 2
Note: During the peak period, congestion backed through the upstream signal at Tucker Industrial Rd.

J
Congestion Type: Mainline Signal Queue/ Platoons
Location: McCurdy Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

K
Congestion Type: Right-Turn Queue
Location: Lilburn Stone Mountain Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the right-turn lane at the signal; congestion typically extended back into the mainline of SR 236.

L
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1
Note: During the peak period, congestion typically backed through the upstream signal at Sheridan Rd

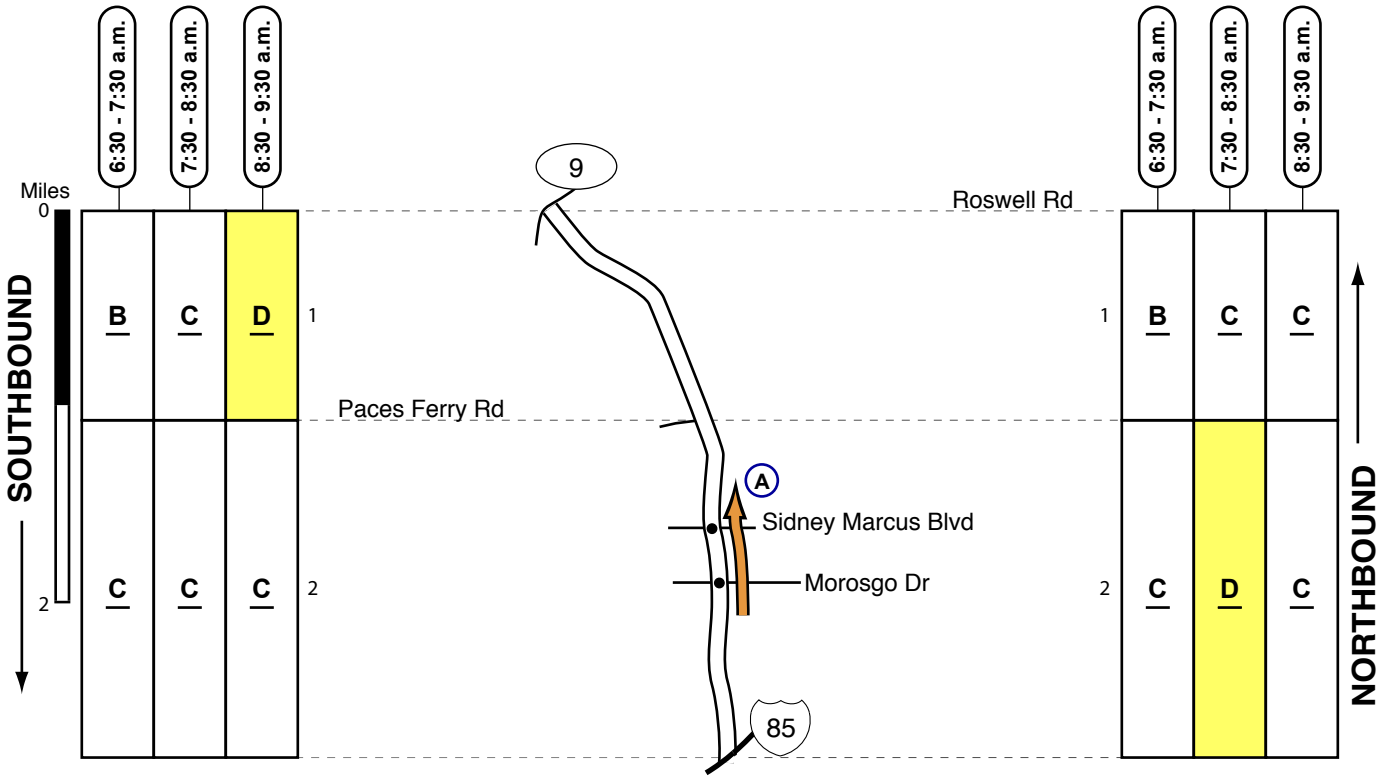
M
Congestion Type: Cross Road Signal Queue
Location: SR 42
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

N
Congestion Type: Cross Road Signal Queue
Location: SR 155
Frequency: Peak hour
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 2

O
Congestion Type: Cross Road Signal Queue
Location: SR 884/Lenox Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

(Blank)

Spring 2008
SR 237 (Fulton County) - Morning

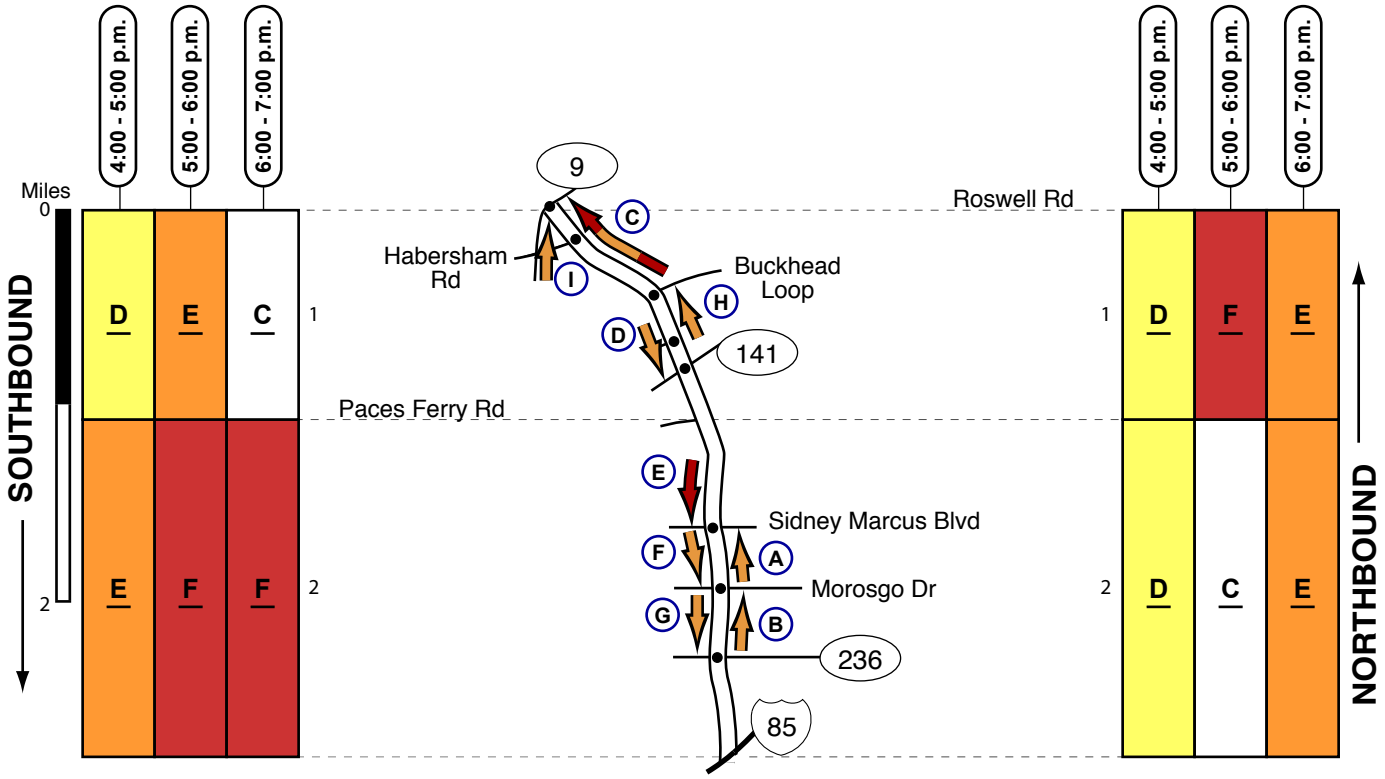


A
Congestion Type: Mainline Signal Queue
Location: Sidney Marcus Blvd & Morosgo Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 237 (Fulton County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 237 (Fulton County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Sidney Marcus Blvd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Morosgo Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: SR 9 & Habersham Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: Northbound congestion appeared to be exacerbated by several signals at drives accessing commercial buildings in Buckehead.

D
Congestion Type: Mainline Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2
Note: The signal upstream of SR 141 (drive for access to commercial buildings) contributed to southbound congestion between Buckhead Loop and SR 141.

E
Congestion Type: Mainline Signal Queue
Location: Sidney Marcus Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 75 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: Morosgo Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

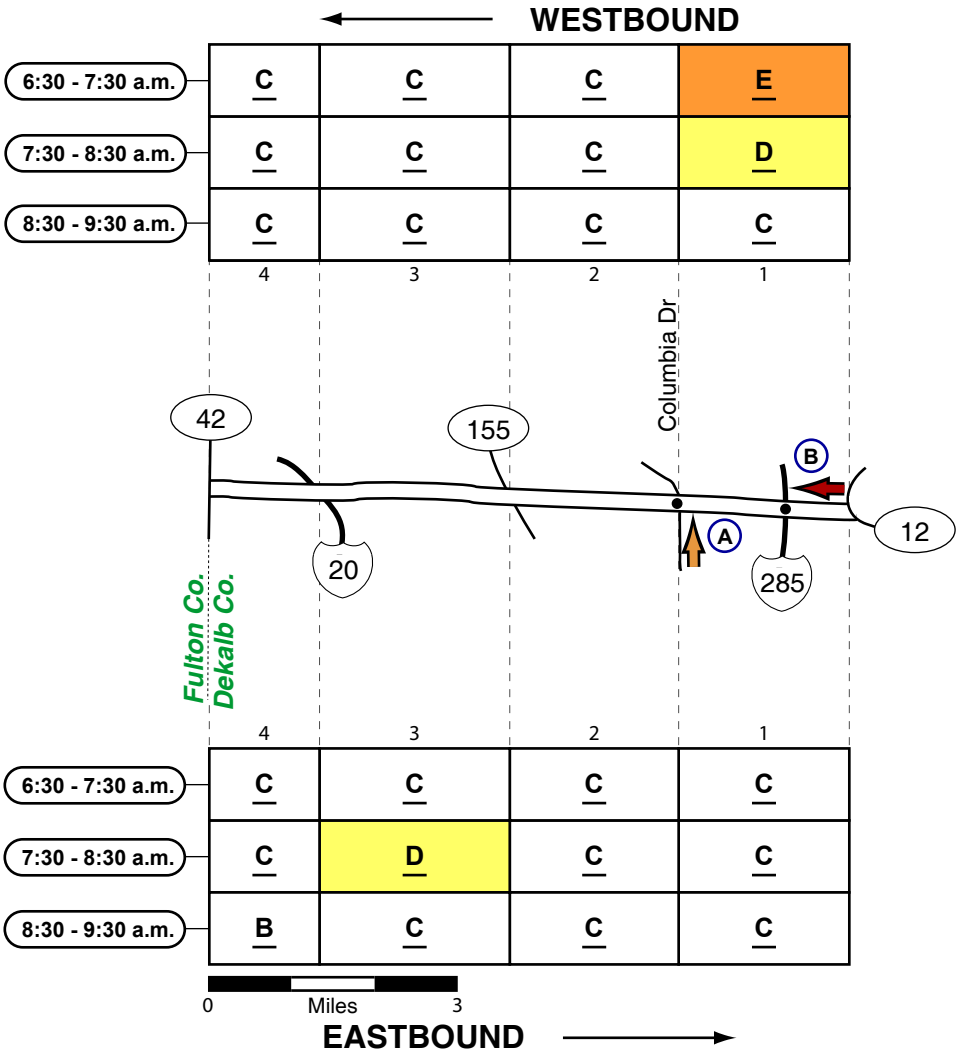
G
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

H
Congestion Type: Left-Turn Queue
Location: Buckhead Loop
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

I
Congestion Type: Cross Road Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2

Spring 2008

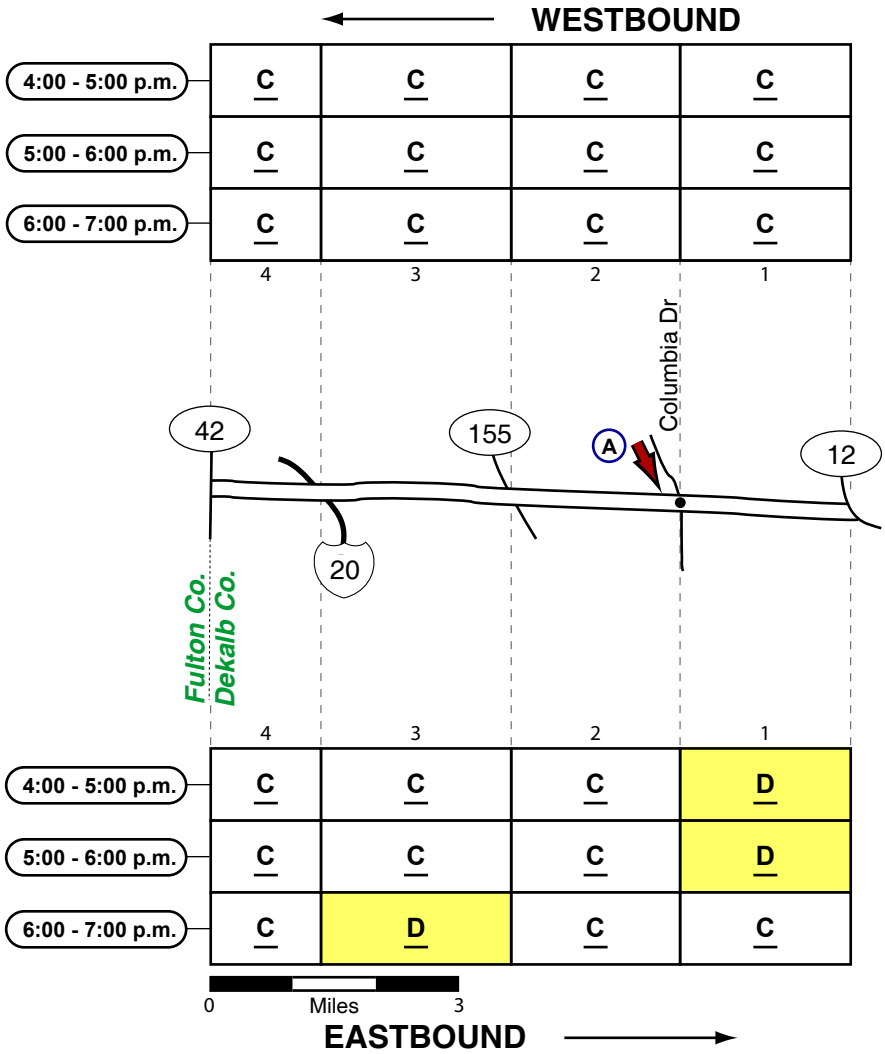
SR 260 (Dekalb County) - Morning



A
Congestion Type: Cross Road Signal
Queue
Location: Columbia Dr
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal
Queue
Location: I-285
Frequency: Most observations before
8:00 a.m.
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

Spring 2008
SR 260 (Dekalb County) - Evening

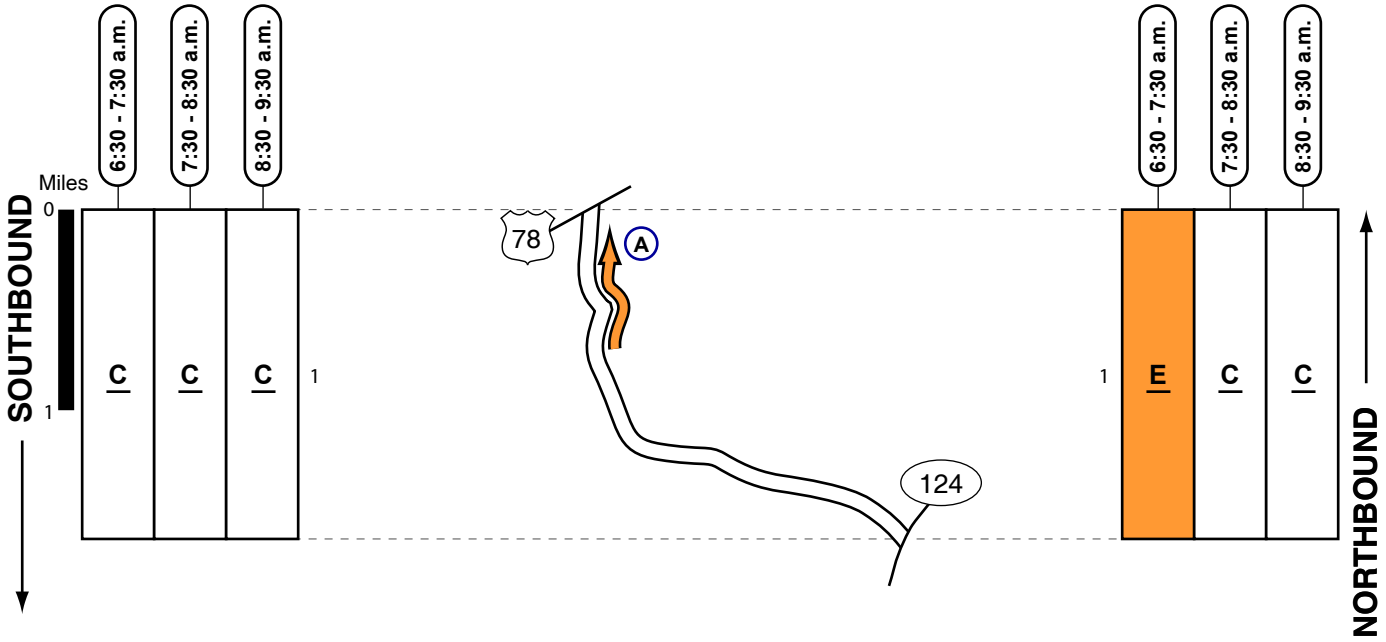


A
Congestion Type: Cross Road Signal Queue
Location: Columbia Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

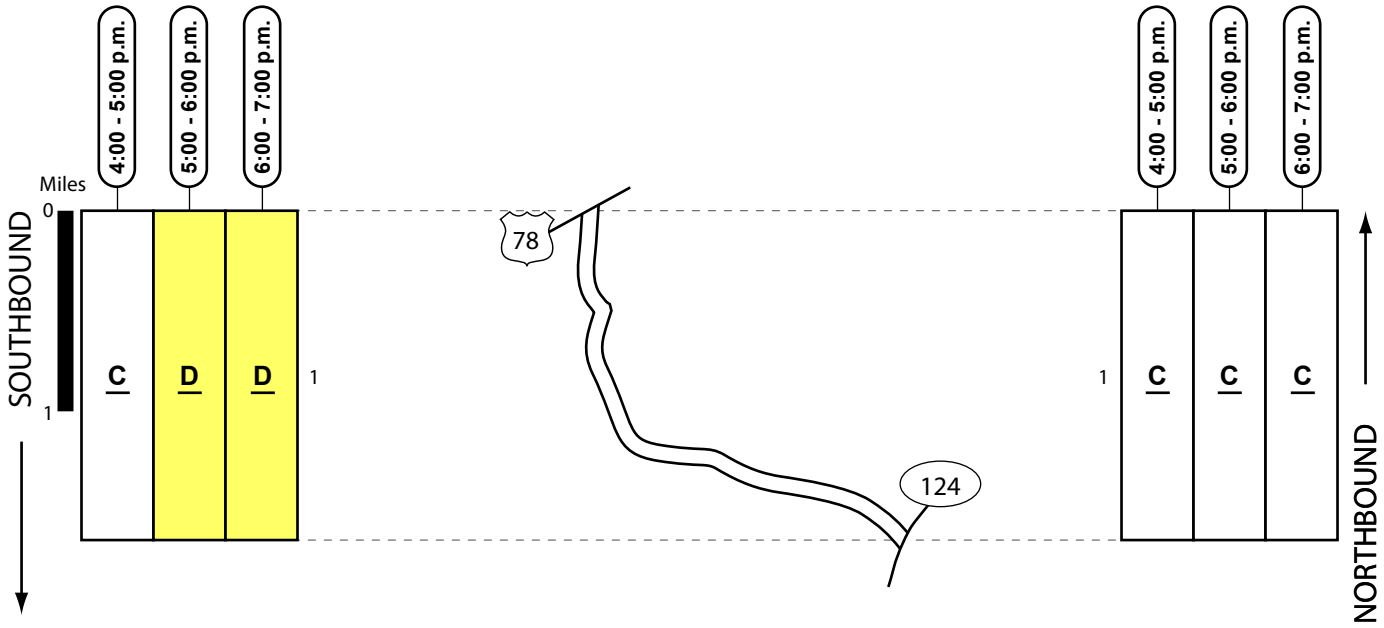
SR 264 (Gwinnett County) - Morning



A
Congestion Type: Platoons
Location: Approaching US 78
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

Spring 2008

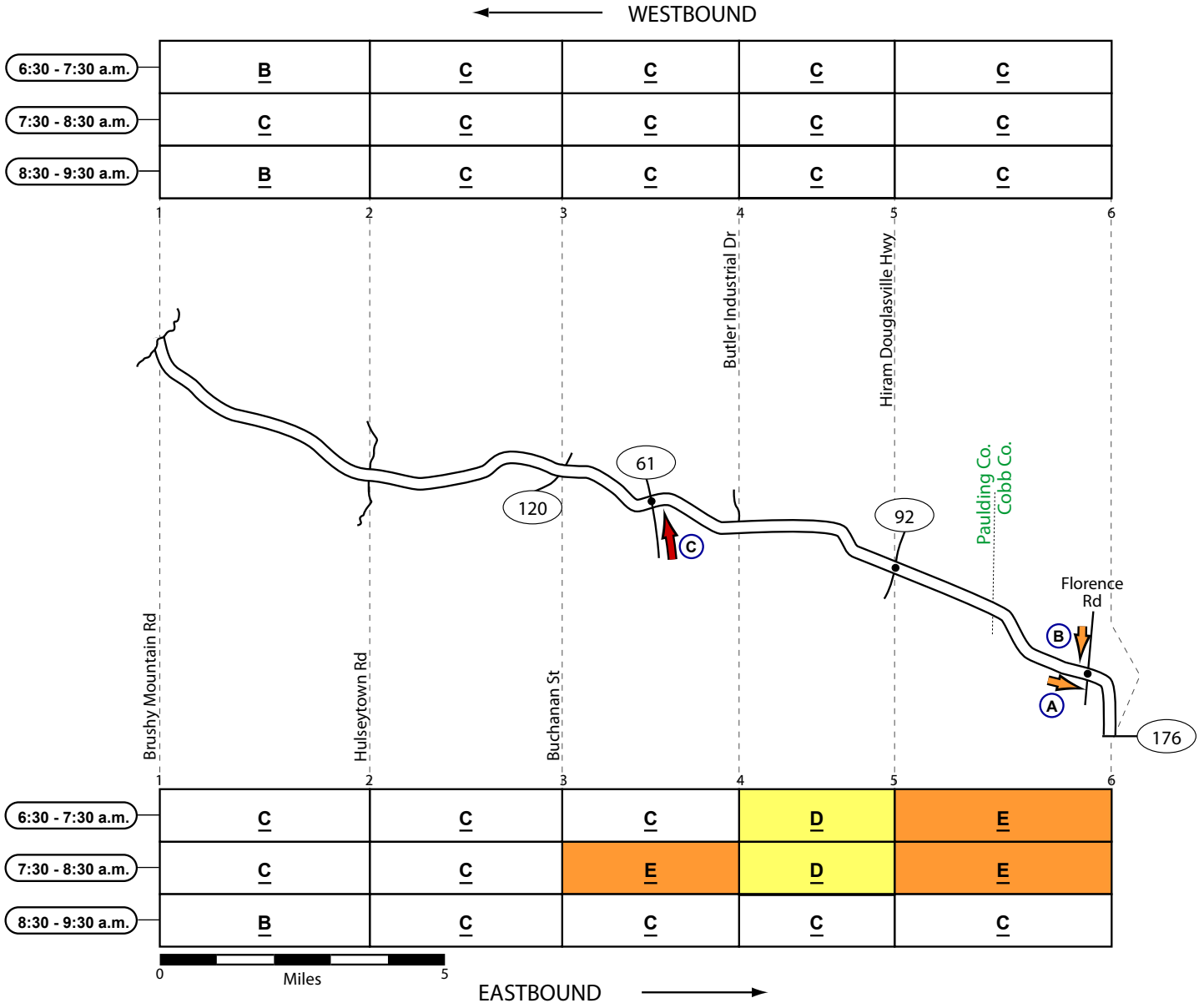
SR 264 (Gwinnett County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

US 278 (Paulding & Cobb Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

US 278 (Paulding & Cobb Counties) - Morning

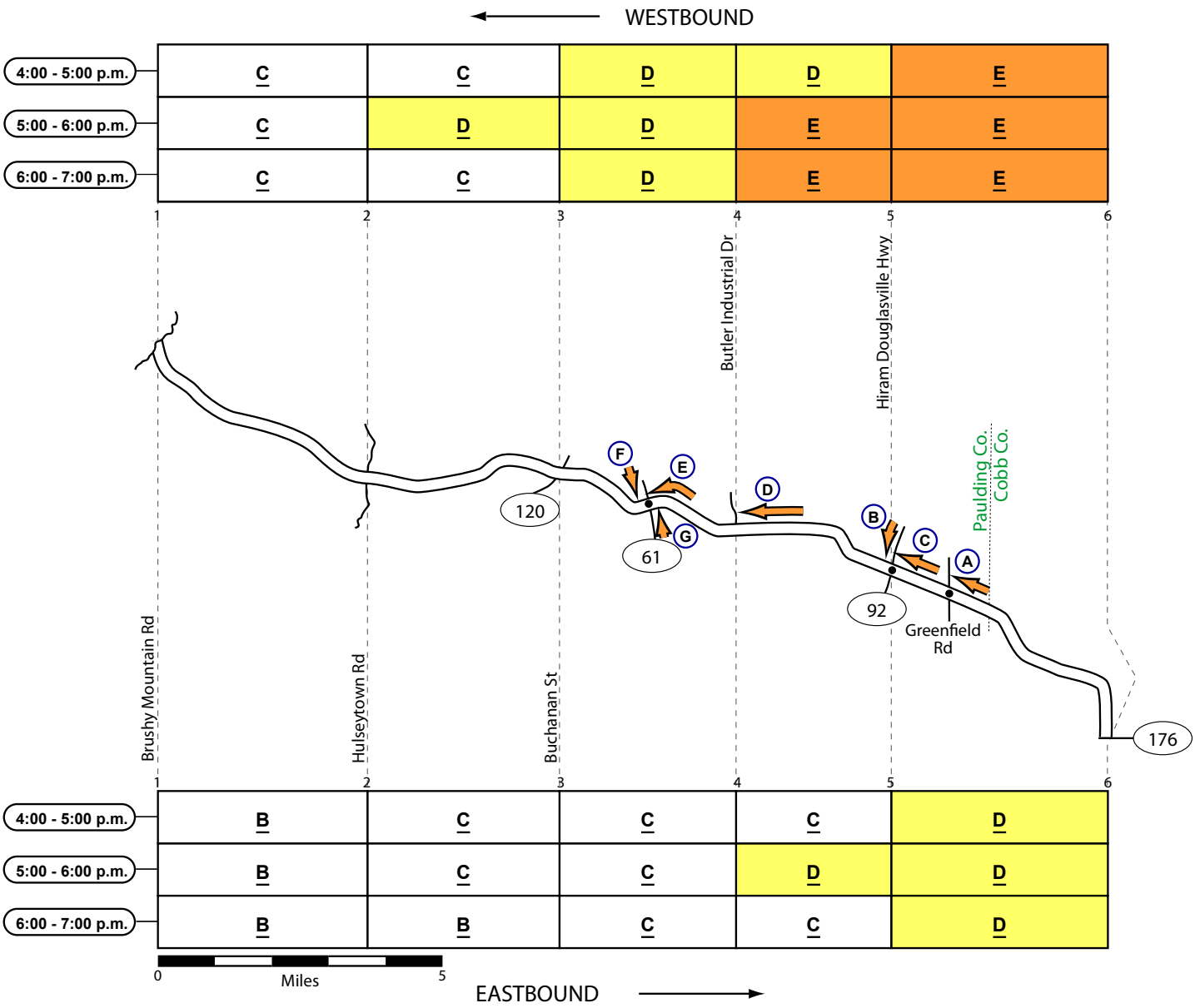
A
Congestion Type: Signal Queue
Location: Florence Rd
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

B
Congestion Type: Congested Cross Road
Location: Florence Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Congested Cross Road
Location: SR 61 (Villa Rica Hwy)
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

Fall 2007

US 278 (Paulding & Cobb Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

US 278 (Paulding & Cobb Counties) - Evening

A
Congestion Type: Signal Queue
Location: Greenfield Rd
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

B
Congestion Type: Congested Cross Road
Location: SR 92
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2
Note: During some observations, congestion approaching the signal at SR 92 extended back through the closely spaced upstream signal at W. Lake Rd.

D
Congestion Type: Platoons
Location: Between SR 92 & Butler Industrial Dr
Frequency: Intermittent
Direction: Westbound
Queue Populations: 25 to 30 vpl
Number of Lanes: 2

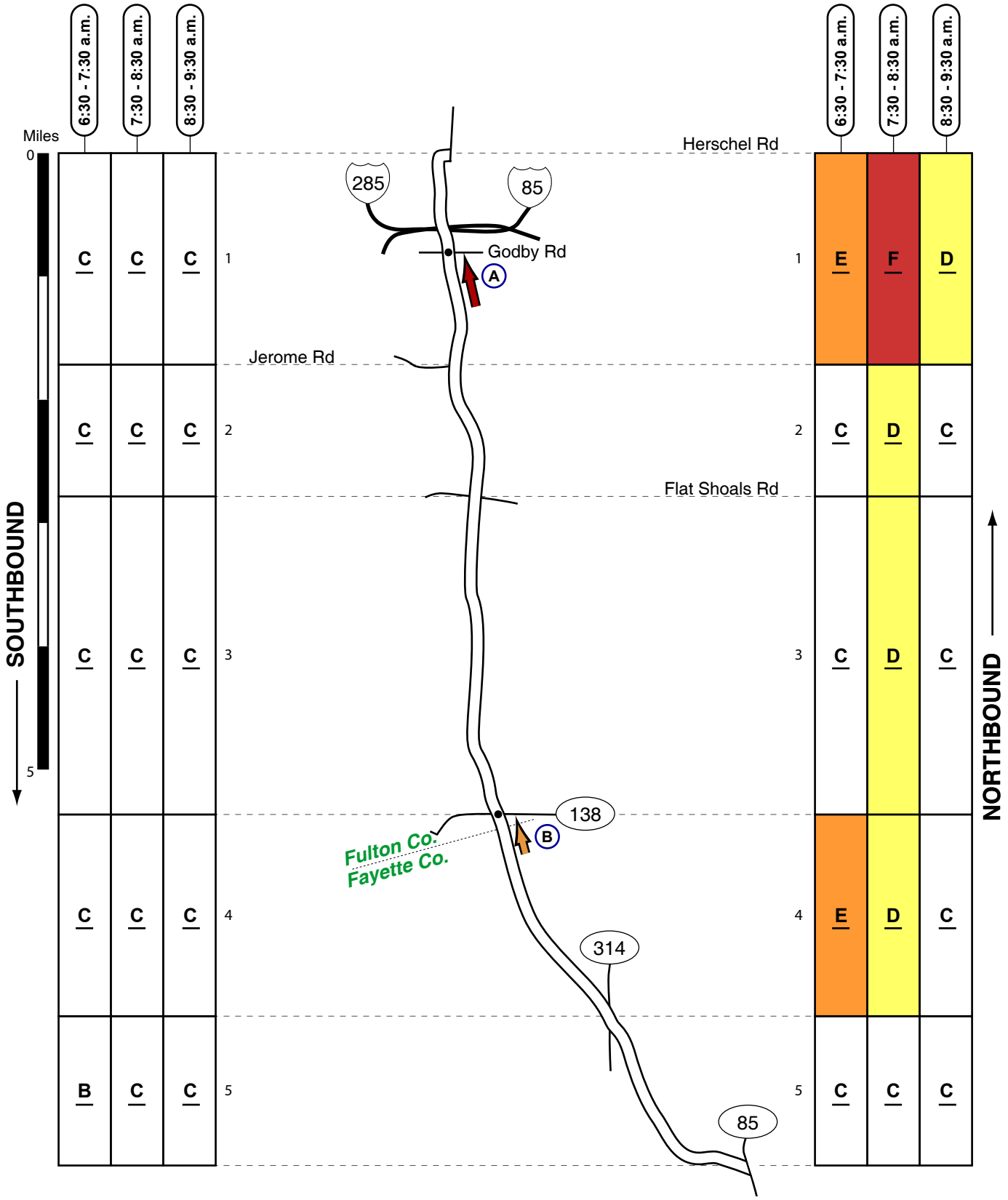
E
Congestion Type: Signal Queue
Location: SR 61 (Villa Rica Hwy)
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left-turn lane.

F
Congestion Type: Congested Cross Road
Location: SR 61 (Villa Rica Hwy)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

G
Congestion Type: Congested Cross Road
Location: SR 61 (Villa Rica Hwy)
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

Spring 2008

SR 279 (Fulton & Fayette Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

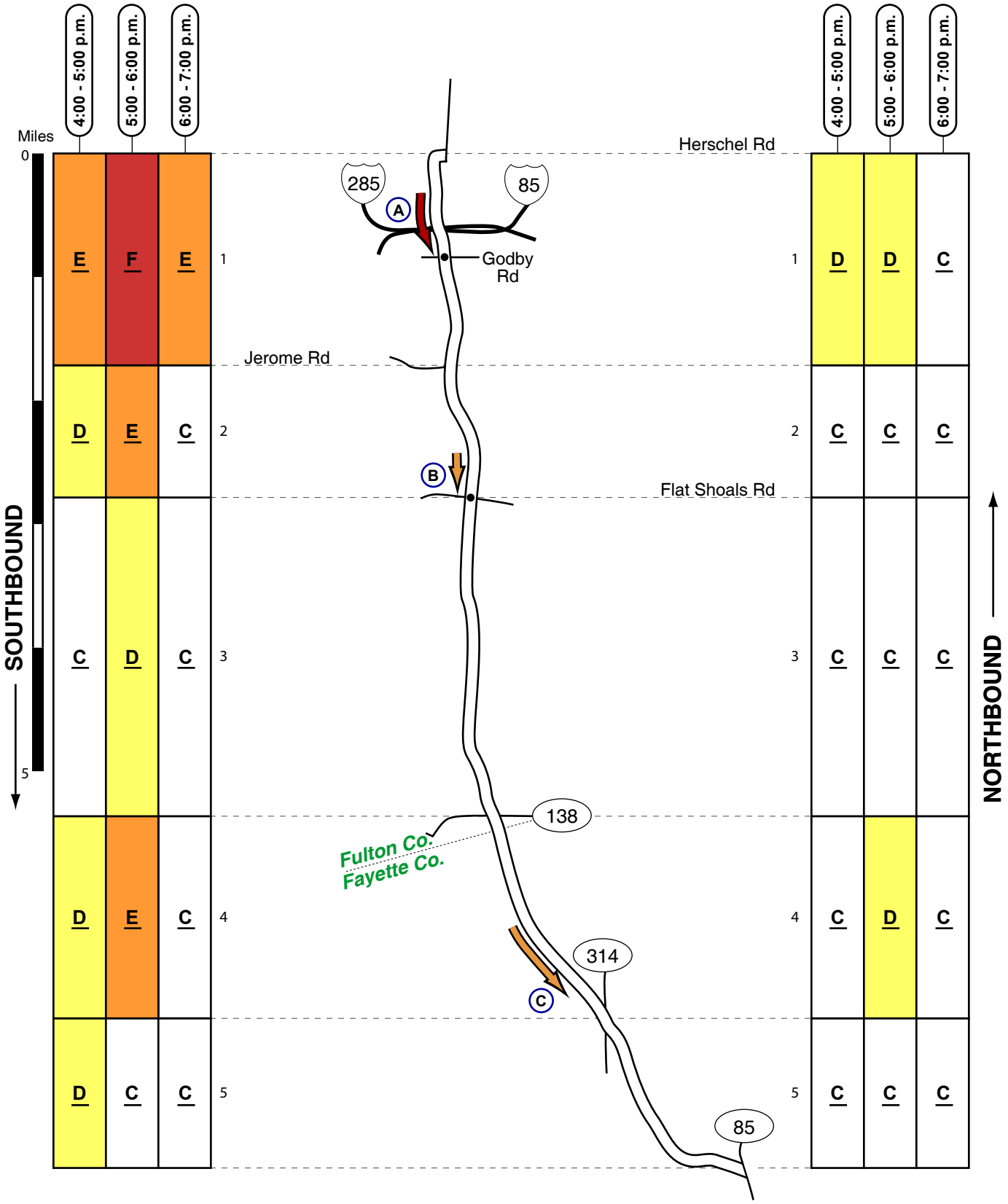
SR 279 (Fulton & Fayette Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Godby Rd
Frequency: Most observations before 8:30 a.m.
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: SR 138
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 279 (Fulton & Fayette Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 279 (Fulton & Fayette Counties) - Evening

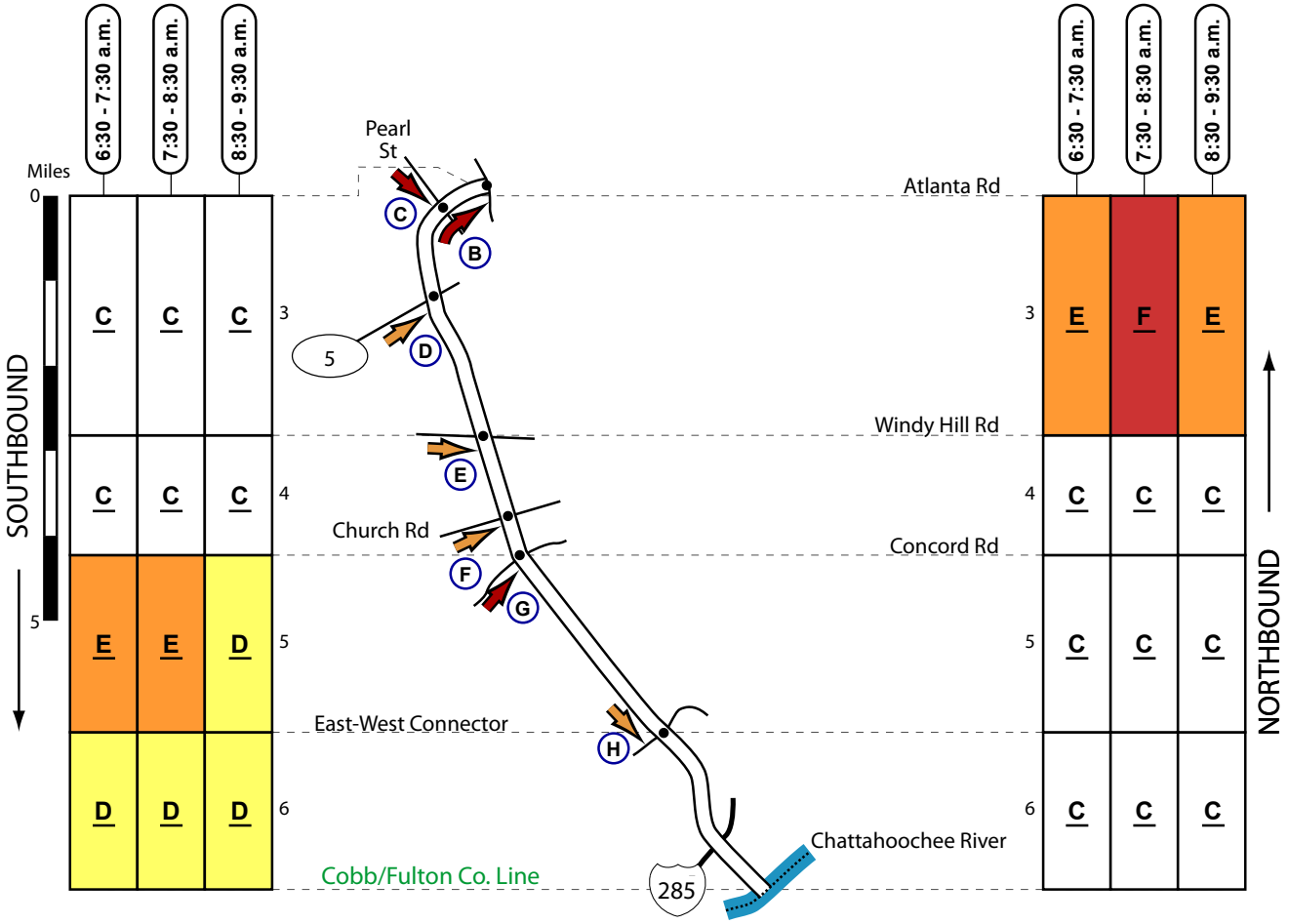
A
Congestion Type: Mainline Signal Queue
Location: Godby Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2

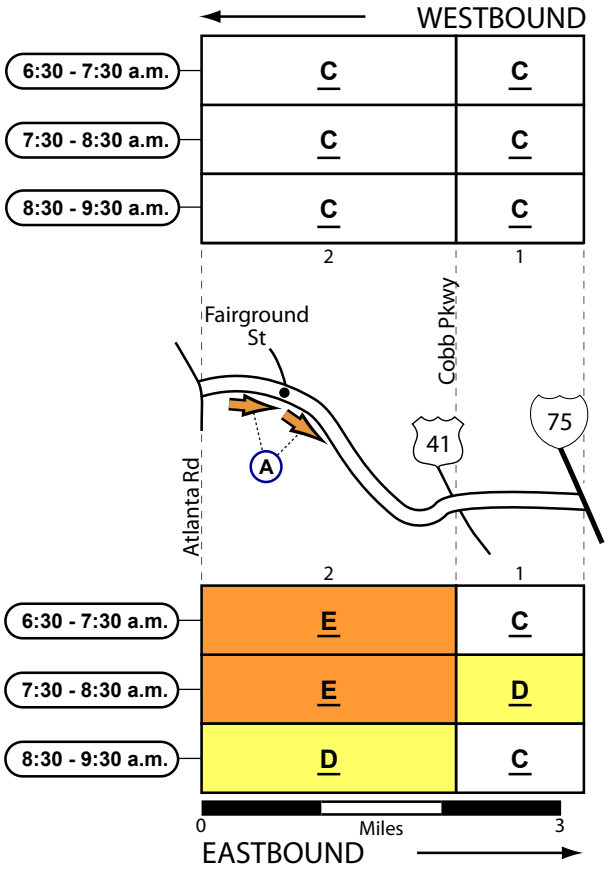
B
Congestion Type: Mainline Signal Queue
Location: Flat Shoals Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

C
Congestion Type: Platoons
Location: Between SR 138 & SR 314
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 280 (Cobb County) - Morning





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 280 (Cobb County) - Morning

A
Congestion Type: Mainline Signal Queue/Platoons
Location: Vicinity of Fairground St
Frequency: Most observations
Direction: Eastbound
Queue/Platoon Population: 20 to 40 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Atlanta Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 100 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: Pearl St
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left turn lane.

D
Congestion Type: Cross Road Signal Queue
Location: SR 5
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

E
Congestion Type: Cross Road Signal Queue
Location: Windy Hill Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

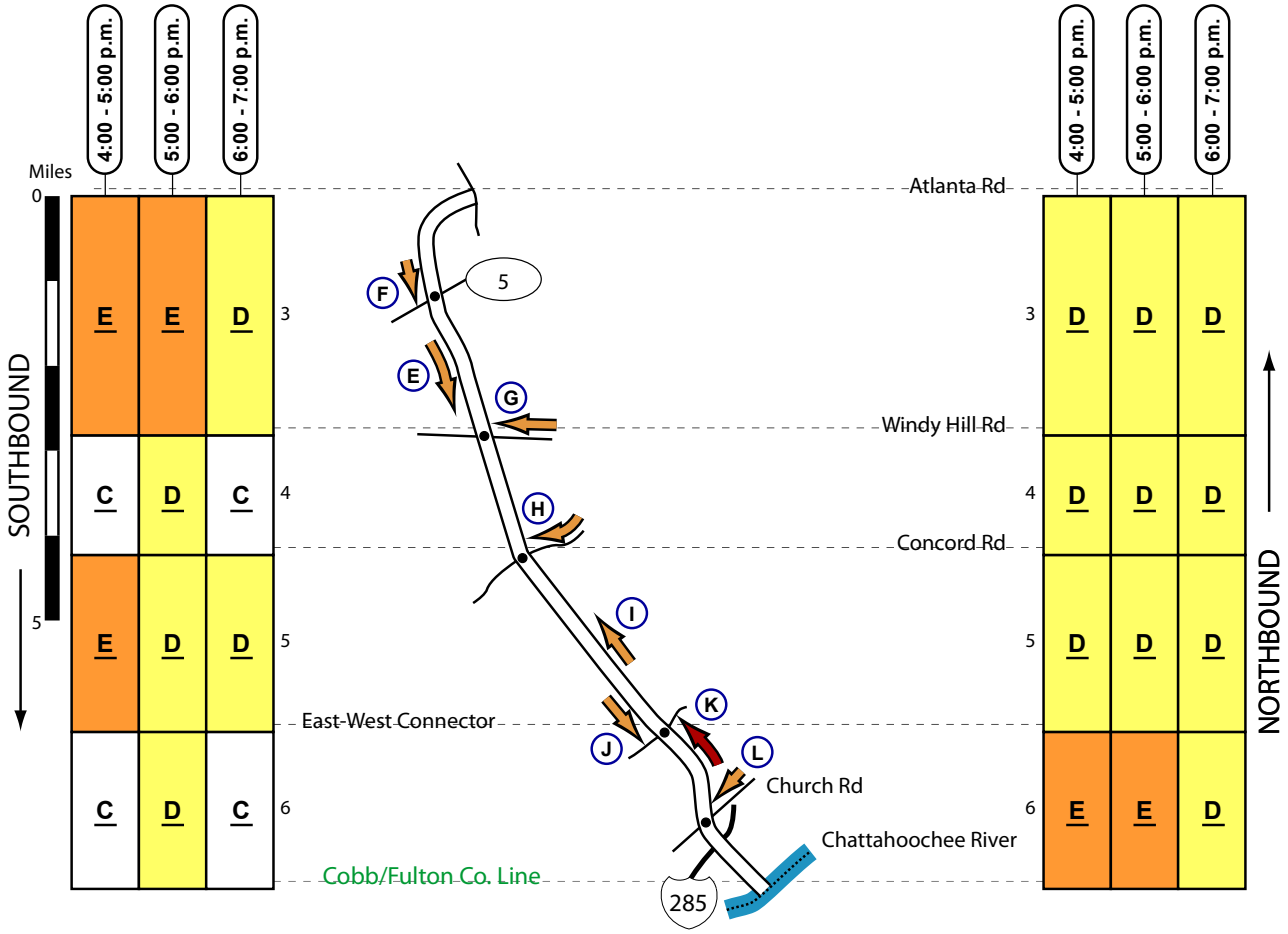
F
Congestion Type: Cross Road Signal Queue
Location: Church Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

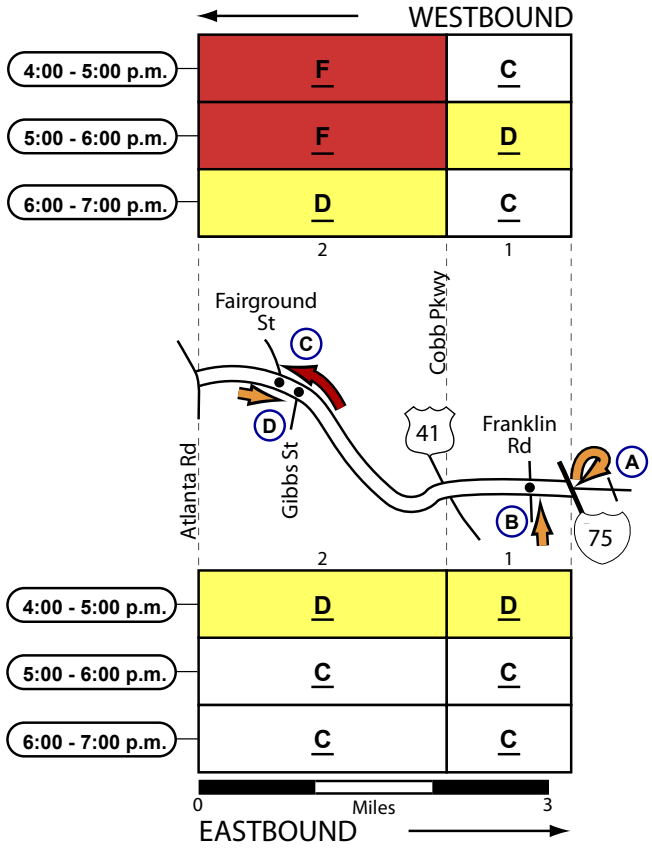
G
Congestion Type: Cross Road Signal Queue
Location: Concord Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: East-West Connector
Frequency: Intermittent
Direction: Southbound
Queue Population: 30 to 35 vpl
Number of Lanes: 2

Spring 2008

SR 280 (Cobb County) - Evening





Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 280 (Cobb County) - Evening

A
Congestion Type: Entrance Ramp Queue
Location: I-75 (to SR 280 WB)
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: The geometrics of the ramp (sharp bend) appeared to exacerbate the congestion.

B
Congestion Type: Cross Road Signal Queue
Location: Franklin Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Fairground St
Frequency: Most observations
Direction: Westbound
Queue Population: 30 to 70 vpl
Number of Lanes: 2
Note: Congestion typically backed through the upstream signal at Gibbs St.

D
Congestion Type: Left-Turn Queue
Location: Fairground St
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: Congestion sometimes extended back into the left-lane of SR 280.

E
Congestion Type: Platoons
Location: Between Atlanta Rd and Windy Hill Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 50 vpl
Number of Lanes: 2

F
Congestion Type: Right-Turn Queue
Location: SR 5
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: Windy Hill Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

H
Congestion Type: Cross Road Signal Queue
Location: Concord Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

I
Congestion Type: Platoons
Location: Between East-West Connector and Concord Rd
Frequency: Intermittent
Direction: Northbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

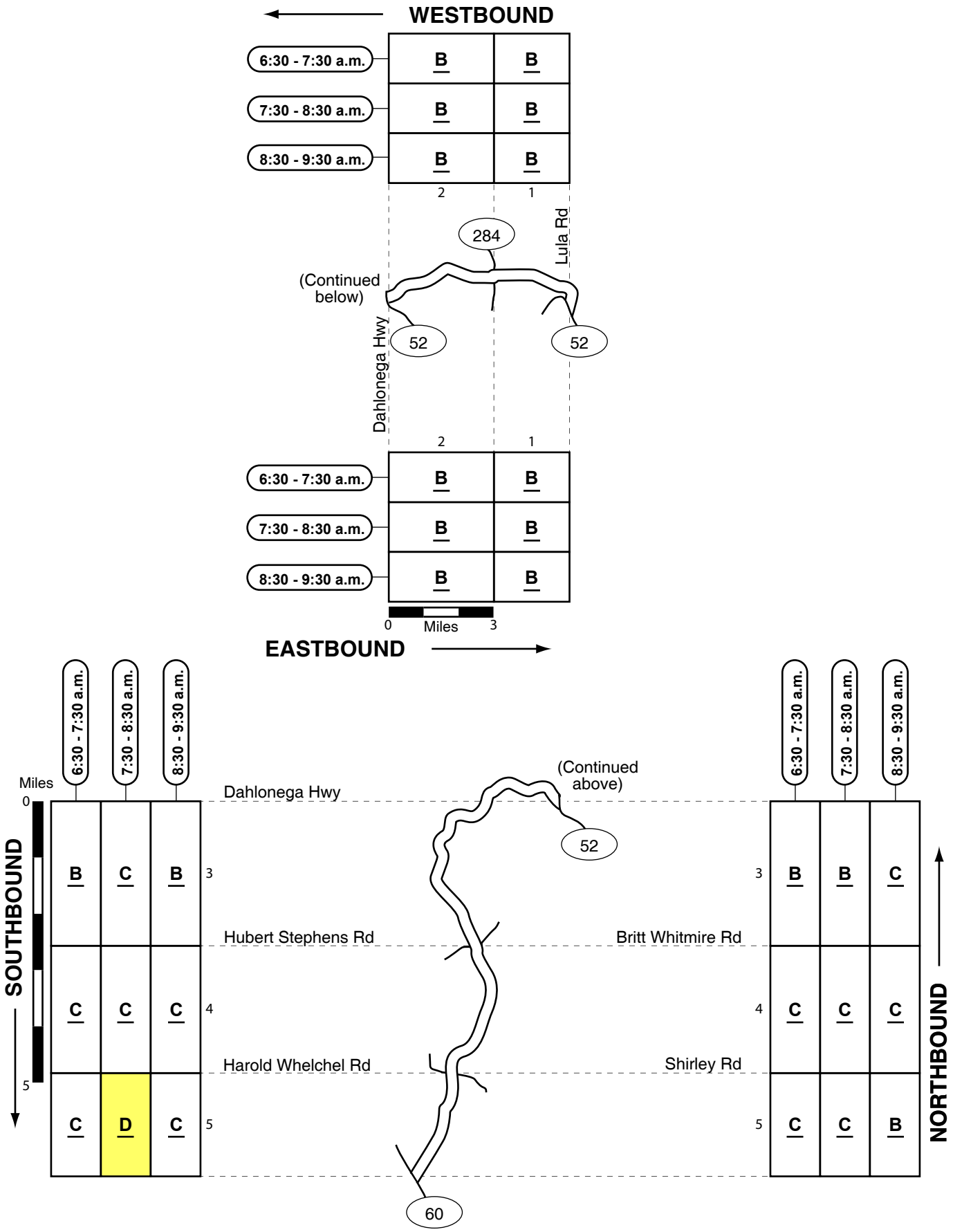
J
Congestion Type: Mainline Signal Queue
Location: East-West Conncector
Frequency: Intermittent
Direction: Southbound
Queue Population: 25 to 35 vpl
Number of Lanes: 2

K
Congestion Type: Mainline Signal Queue
Location: East-West Connector
Frequency: Most observations before 6:00 p.m.
Direction: Northbound
Queue Population: 35 to 55 vpl
Number of Lanes: 2

L
Congestion Type: Cross Road Signal Queue
Location: Church Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn lane; congestion sometimes extended back into the mainline of Church Rd

Spring 2008

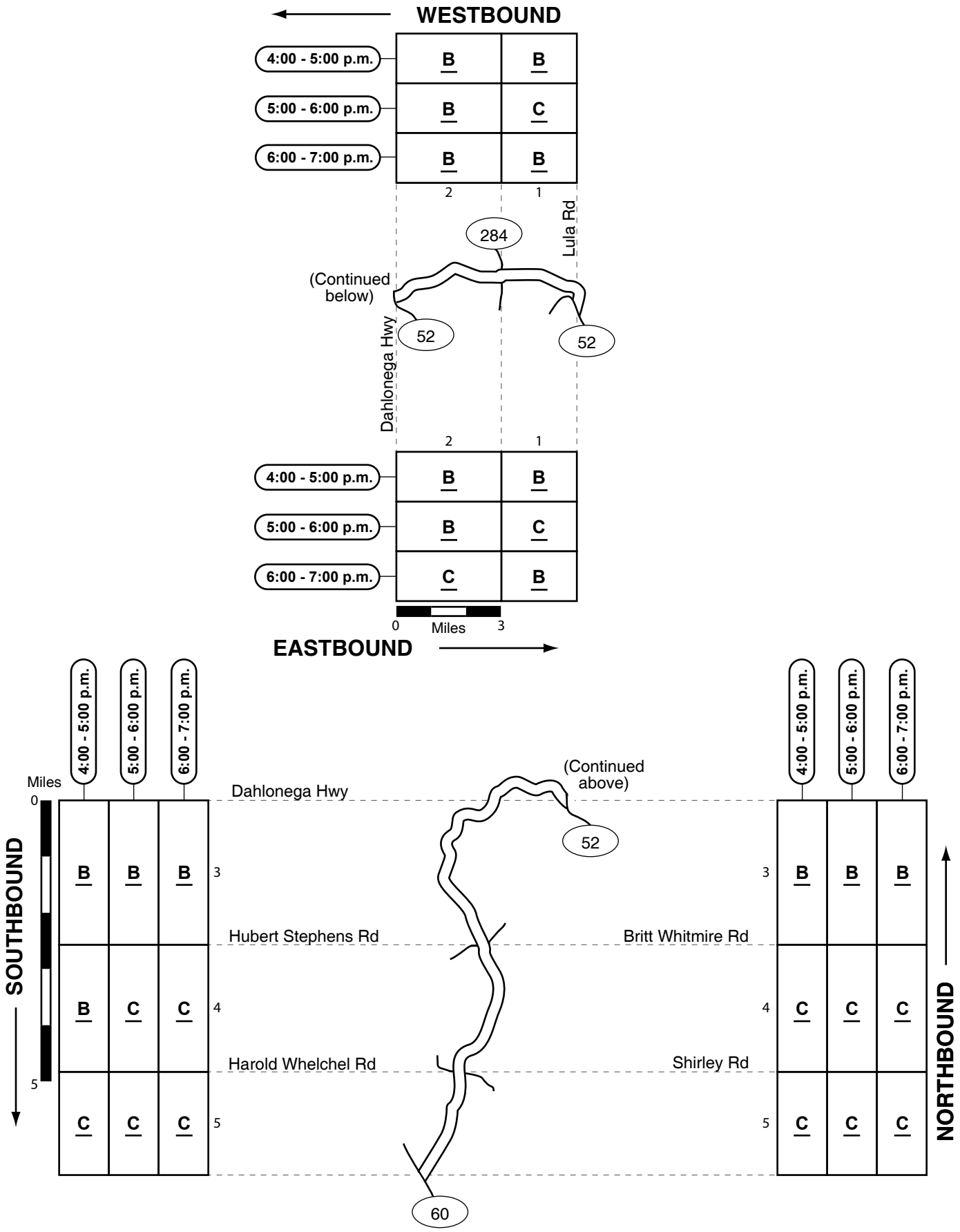
SR 283 (Hall County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

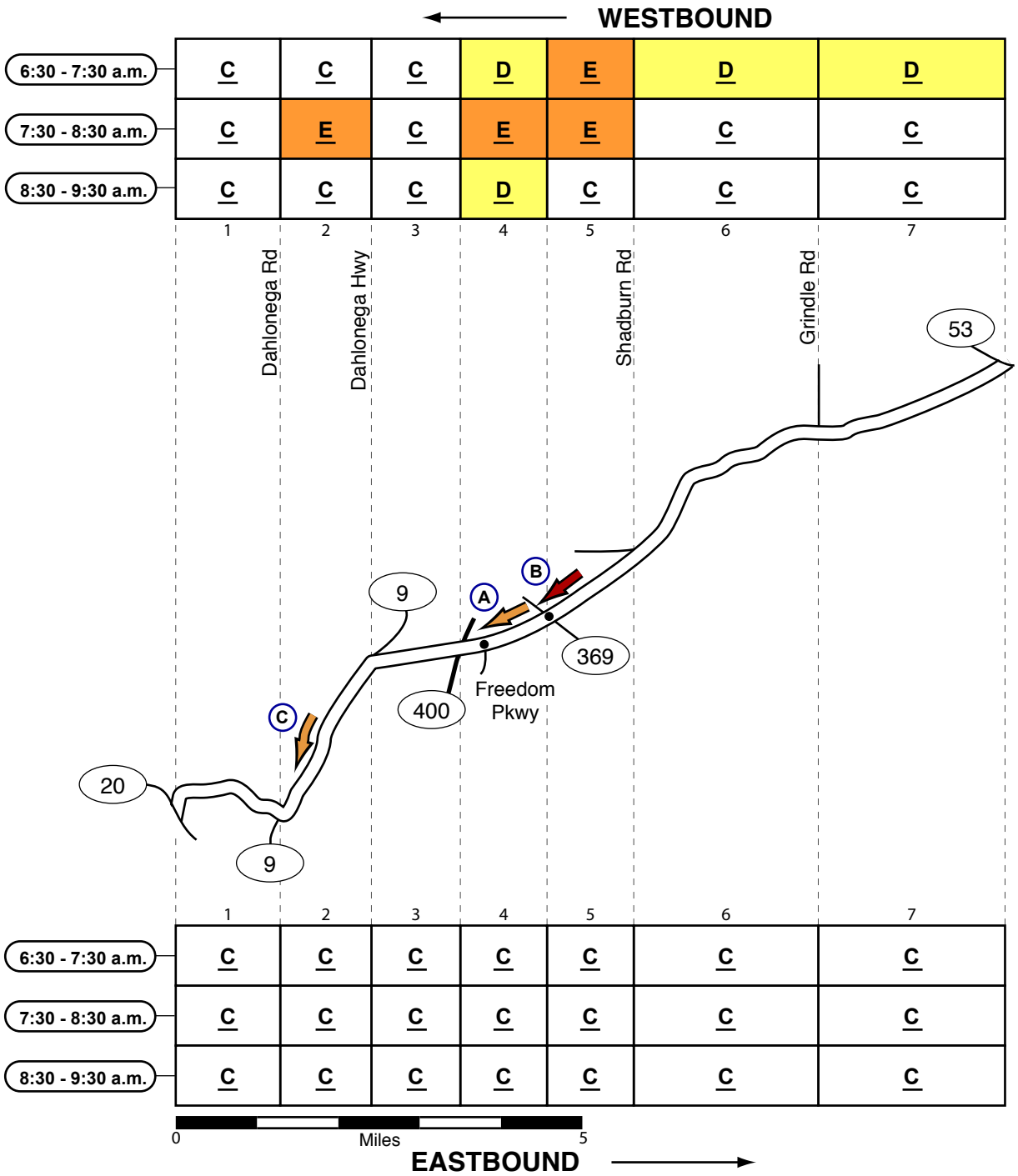
SR 283 (Hall County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

(Blank)

Spring 2008
SR 306 (Forsyth County) - Morning



A
Congestion Type: Mainline Signal Queue
Location: Freedom Pkwy
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

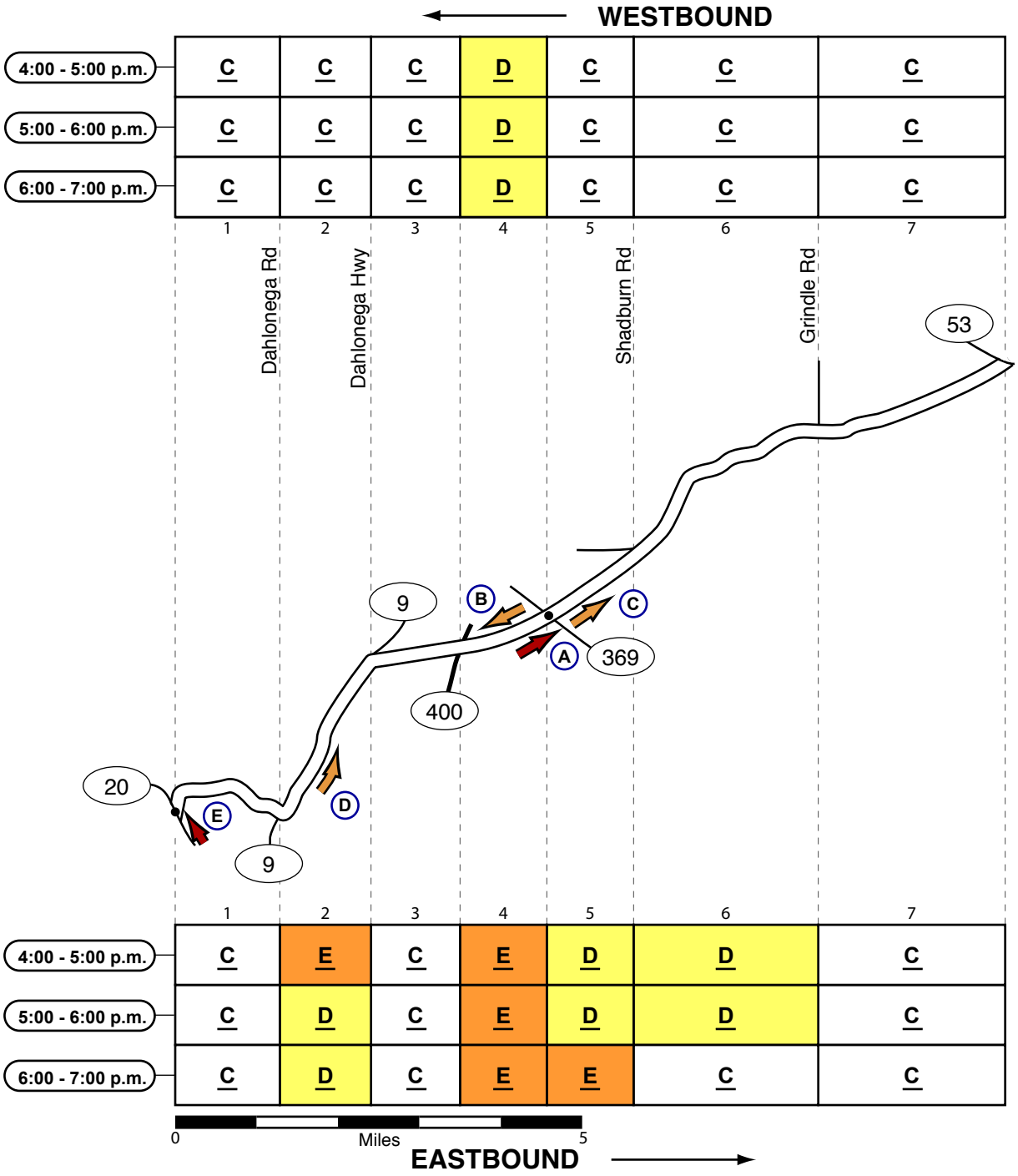
B
Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1

C
Congestion Type: Platoons
Location: Between Dahlonega Hwy and Dahlonega Rd
Frequency: Intermittent
Direction: Southbound
Platoon Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 306 (Forsyth County) - Evening



	1	2	3	4	5	6	7
4:00 - 5:00 p.m.	C	C	C	D	C	C	C
5:00 - 6:00 p.m.	C	C	C	D	C	C	C
6:00 - 7:00 p.m.	C	C	C	D	C	C	C

	1	2	3	4	5	6	7
4:00 - 5:00 p.m.	C	E	C	E	D	D	C
5:00 - 6:00 p.m.	C	D	C	E	D	D	C
6:00 - 7:00 p.m.	C	D	C	E	E	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 306 (Forsyth County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 369
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between SR 369 and SR 400
Frequency: Intermittent
Direction: Westbound
Platoon Population: 20 to 40 vpl
Number of Lanes: 1

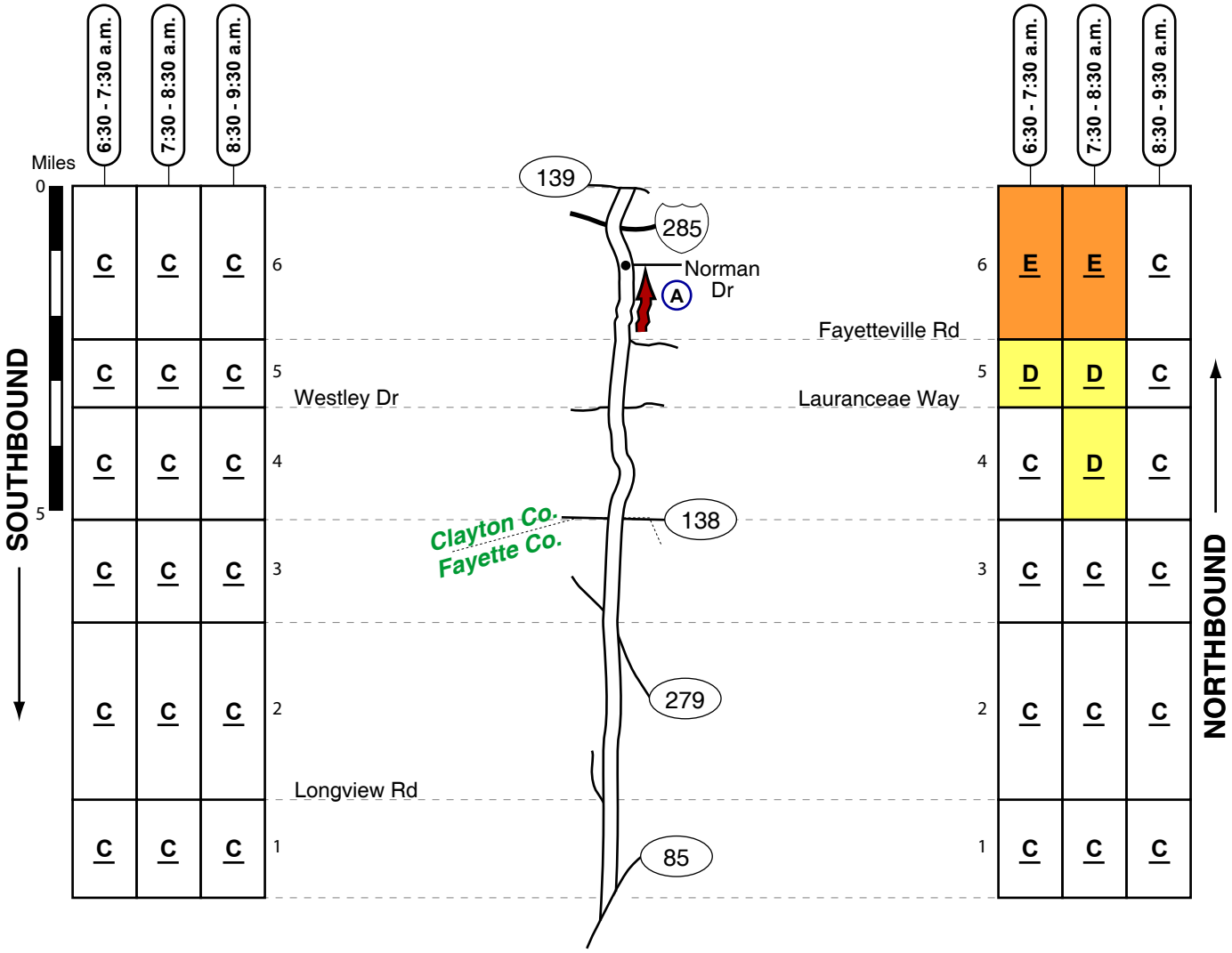
C
Congestion Type: Platoons
Location: Between SR 369 & Shadburn Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between Dahlonega Rd and Dahlonega Hwy
Frequency: Most observations before 5:00 p.m.
Direction: Northbound
Platoon Population: 25 to 50 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: SR 20
Frequency: Most observations before 6:00 p.m.
Direction: Northbound
Queue Population: 40 to 60 vpl
Number of Lanes: 1

Spring 2008

SR 314 (Clayton & Fayette Counties) - Morning

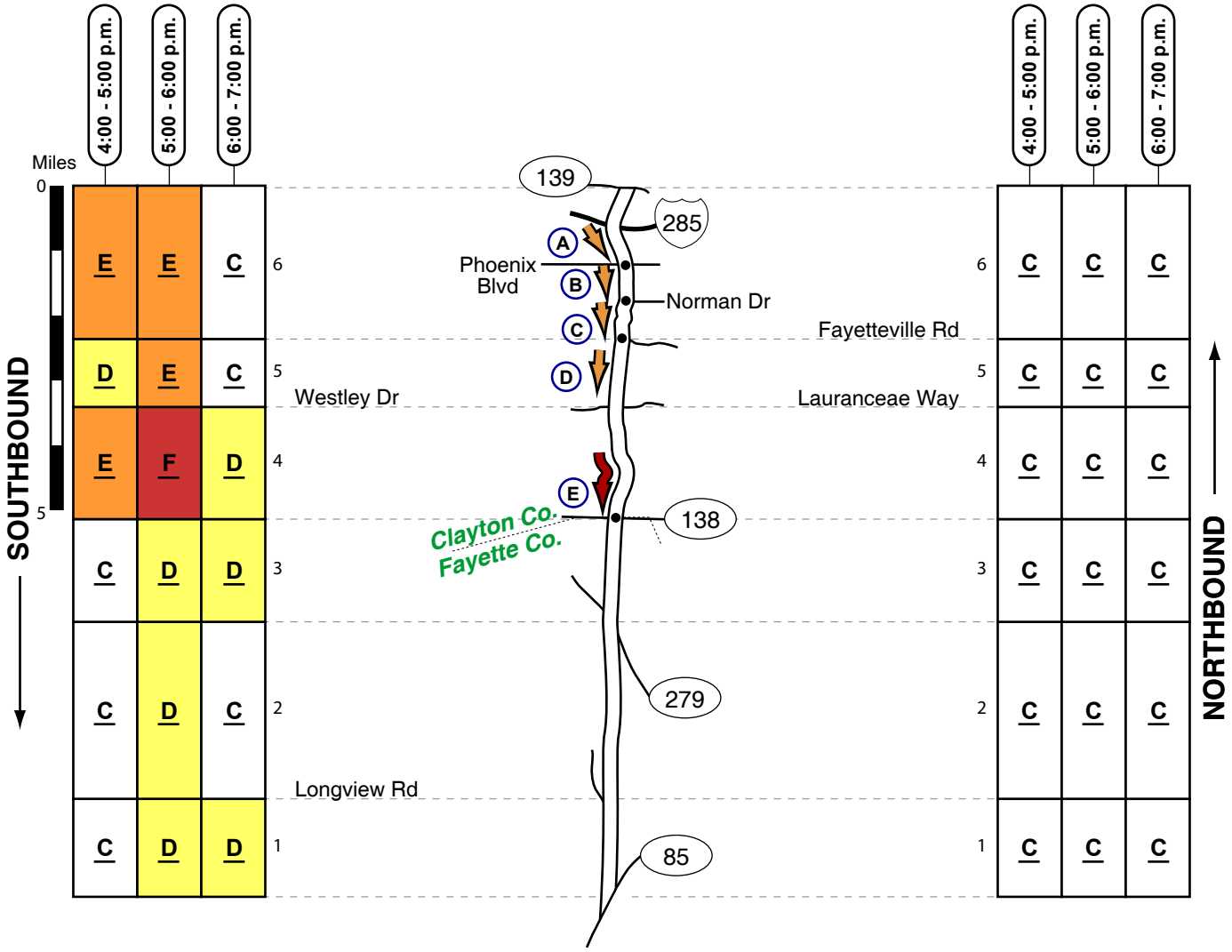


A
Congestion Type: Mainline Signal Queue/Platoons
Location: Norman Dr
Frequency: Most observations before 8:30 a.m.
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 314 (Clayton & Fayette Counties) - Evening



A
Congestion Type: Mainline Signal Queue
Location: Phoenix Blvd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Norman Dr
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Fayetteville Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between Fayetteville Rd & Westley Dr
Frequency: Intermittent
Direction: Southbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: SR 138
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

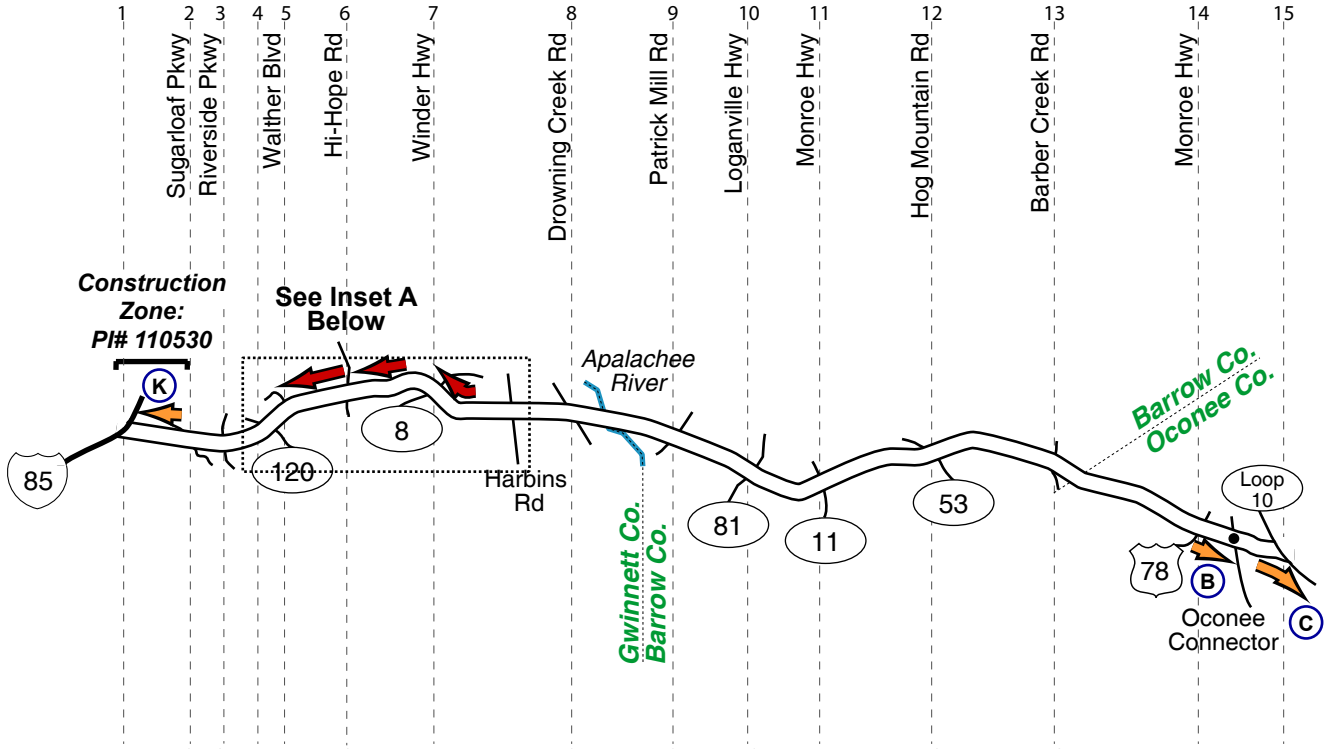
Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007

SR 316 (Gwinnett/Barrow & Oconee Counties) - Morning

WESTBOUND

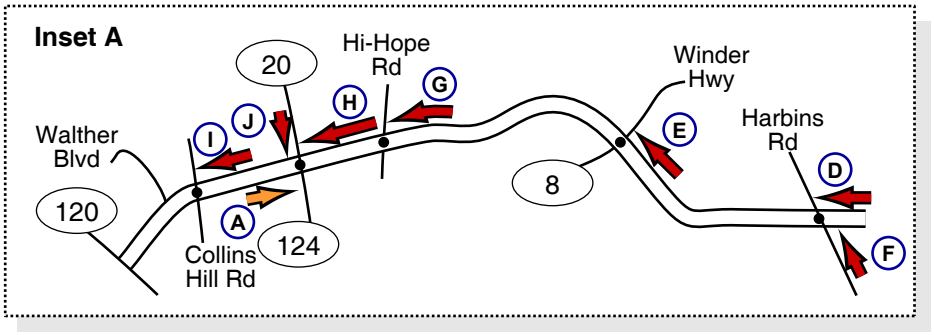
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6:30 - 7:30 a.m.	E[1,4]	B	A	C	F	F	F	D	C	C	C	C	C	C	C
7:30 - 8:30 a.m.	D[1,4]	B	A	B	F	E	E	D	C	C	C	C	C	C	C
8:30 - 9:30 a.m.	C[1,4]	A	A	C	F	D	D	C	C	C	C	C	C	C	C



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6:30 - 7:30 a.m.	B	B	B	A	E	D	C	C	C	C	C	C	C	C	C
7:30 - 8:30 a.m.	B	B	B	A	E	D	D	C	C	C	C	C	C	C	E
8:30 - 9:30 a.m.	B	A	B	B	D	D	C	C	C	C	C	C	C	C	C

0 Miles 5

EASTBOUND



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 316 (Gwinnett/Barrow & Oconee Counties) - Morning

A
Congestion Type: Signal Queue
Location: SR 20/SR 124
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: Oconee Connector
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

C
Congestion Type: Platoons
Location: Approaching Loop 10
Frequency: Peak Hour
Direction: Eastbound
Platoon Populations: 20 to 30 vpl
Number of Lanes: 1
Note: During some observations, eastbound congestion was found in the right lane (dedicated lane for vehicles entering the ramp to eastbound Loop 10) between Oconee Connector and SR 10.

D
Congestion Type: Signal Queue
Location: Harbins Rd
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Populations: 25 to 50 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: SR 8 (Winder Hwy)
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Populations: 25 to 70 vpl
Number of Lanes: 2

F
Congestion Type: Congested Cross Road
Location: Harbins Rd
Frequency: Most observations before 8:00 a.m.
Direction: Northbound
Queue Populations: 25 to 50 vpl
Number of Lanes: 1

G
Congestion Type: Signal Queue
Location: Hi-Hope Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 25 to 60 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Westbound
Queue Populations: 25 to 70 vpl
Number of Lanes: 2

I
Congestion Type: Signal Queue
Location: Collins Hill Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 45 vpl
Number of Lanes: 2

J
Congestion Type: Congested Cross Road
Location: SR 20
Frequency: Most observations
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

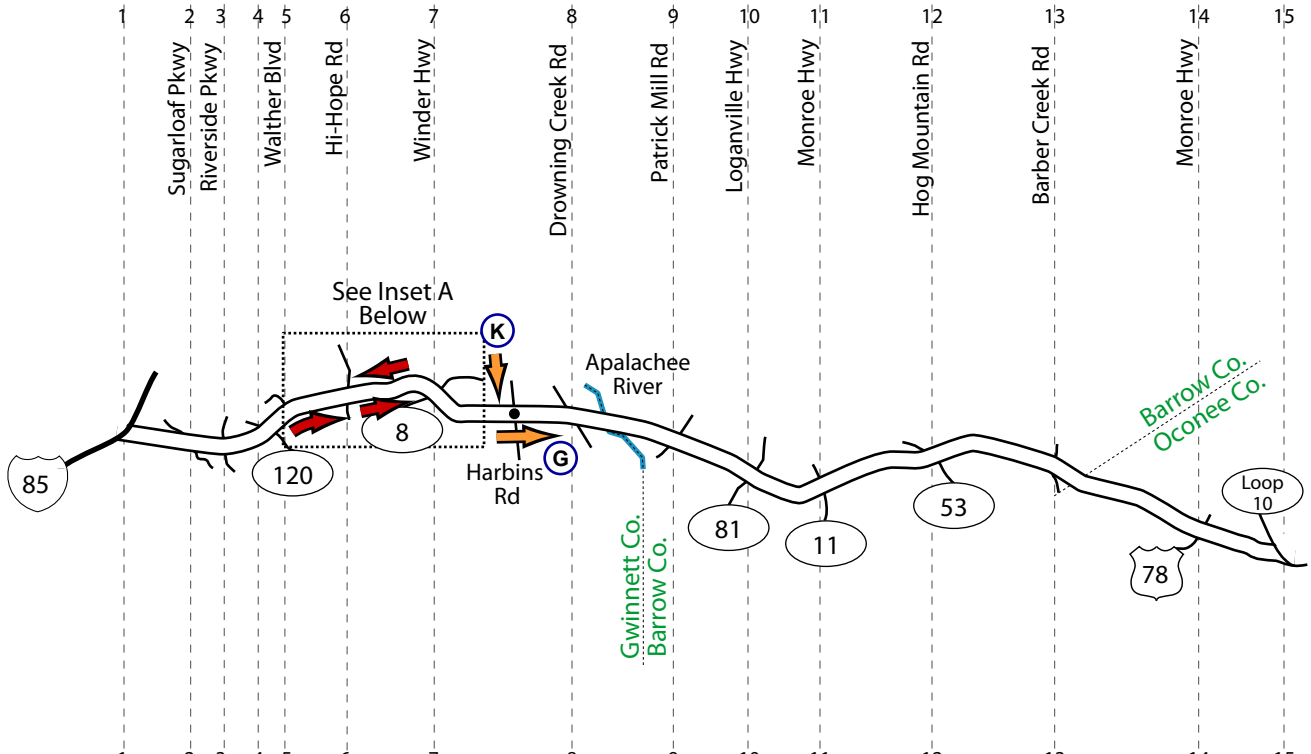
K
Congestion Type: Mainline Congestion
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Location: Between Sugarloaf Pkwy and I-85
Queue Length: 1 to 2 miles
Estimated Speed: 20 to 40 mph
Potential Cause(s): During the Fall 2007 aerial survey, the SR 316 / I-85 Interchange was under construction. During the earlier survey flights, there was a lane drop (2 lanes to 1) in the construction zone; later in the survey, three lanes were available for vehicles heading southbound at the terminus of SR 316 (two lanes to I-85; one lane to the I-85 service road). Westbound congestion was found on SR 316 approaching the I-85 Interchange during the earlier flights when the lane drop was present; westbound congestion was not found on SR 316 during the survey flights when three lanes were available for southbound vehicles.

Fall 2007

SR 316 (Gwinnett/Barrow & Oconee Counties) - Evening

WESTBOUND

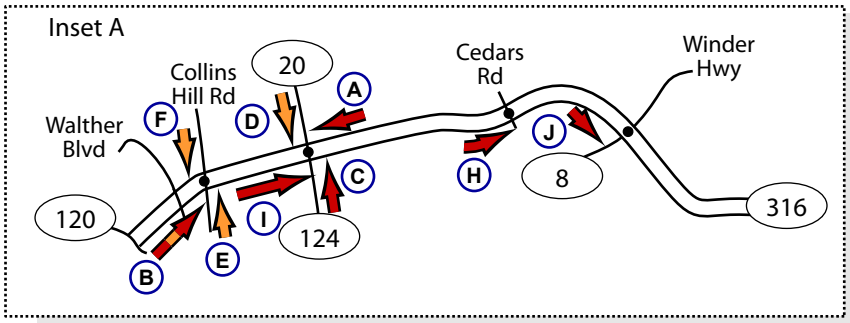
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4:00 - 5:00 p.m.	A	A	A	A	E	D	D	C	C	C	C	C	C	C	C
5:00 - 6:00 p.m.	B	A	A	A	E	D	D	D	C	D	D	C	C	C	D
6:00 - 7:00 p.m.	B	A	A	B	F	C	D	C	C	C	C	C	C	C	C



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4:00 - 5:00 p.m.	C	B	C	165	F	E	E	D	D	D	C	C	C	D
5:00 - 6:00 p.m.	D	C	E	170	F	E	E	D	D	D	D	D	C	D
6:00 - 7:00 p.m.	C	B	B	150	F	E	E	D	C	C	C	C	C	D

0 Miles 5

EASTBOUND



Arterial LOS Legend

A	B	C	D	E	F
Very Light	Light	Moderate	Heavy	Congested	Severe

SR 316 (Gwinnett/Barrow & Oconee Counties) - Evening

A
Congestion Type: Signal Queue
Location: SR 20
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2

B
Congestion Type: Signal Queue
Location: Collins Hill Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 150 vpl
Number of Lanes: 2
Note: During most observations, eastbound congestion approaching the signal at Collins Hill Rd extended back to the vicinity of SR 120 (a distance of approximately 1.5 miles).

C
Congestion Type: Congested Cross Road
Location: SR 20
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2
Note: During some observations, northbound congestion approaching SR 316 extended back through the upstream signal at Hurricane Shoals Rd.

D
Congestion Type: Congested Cross Road
Location: SR 20
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

E
Congestion Type: Congested Cross Road
Location: Collins Hill Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Congested Cross Road
Location: Collins Hill Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

G
Congestion Type: Platoons
Location: Between SR 8 (Winder Hwy) and Drowning Creek Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 25 to 35 vpl
Number of Lanes: 2

H
Congestion Type: Signal Queue
Location: Cedars Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

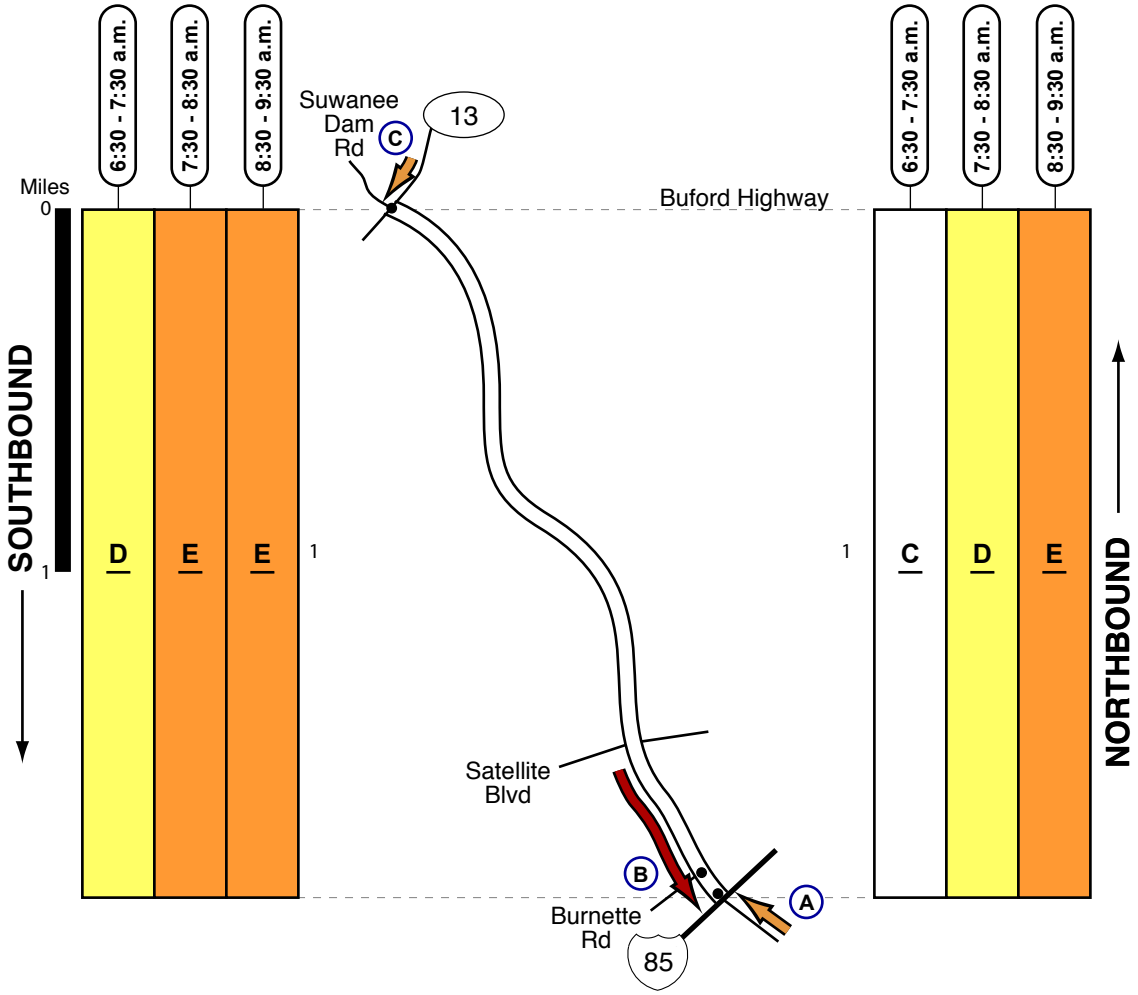
I
Congestion Type: Signal Queue
Location: SR 20
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Signal Queue
Location: SR 8 (Winder Hwy)
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

K
Congestion Type: Congested Cross Road
Location: Harbins Rd
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

Spring 2008

SR 317 (Gwinnett County) - Morning



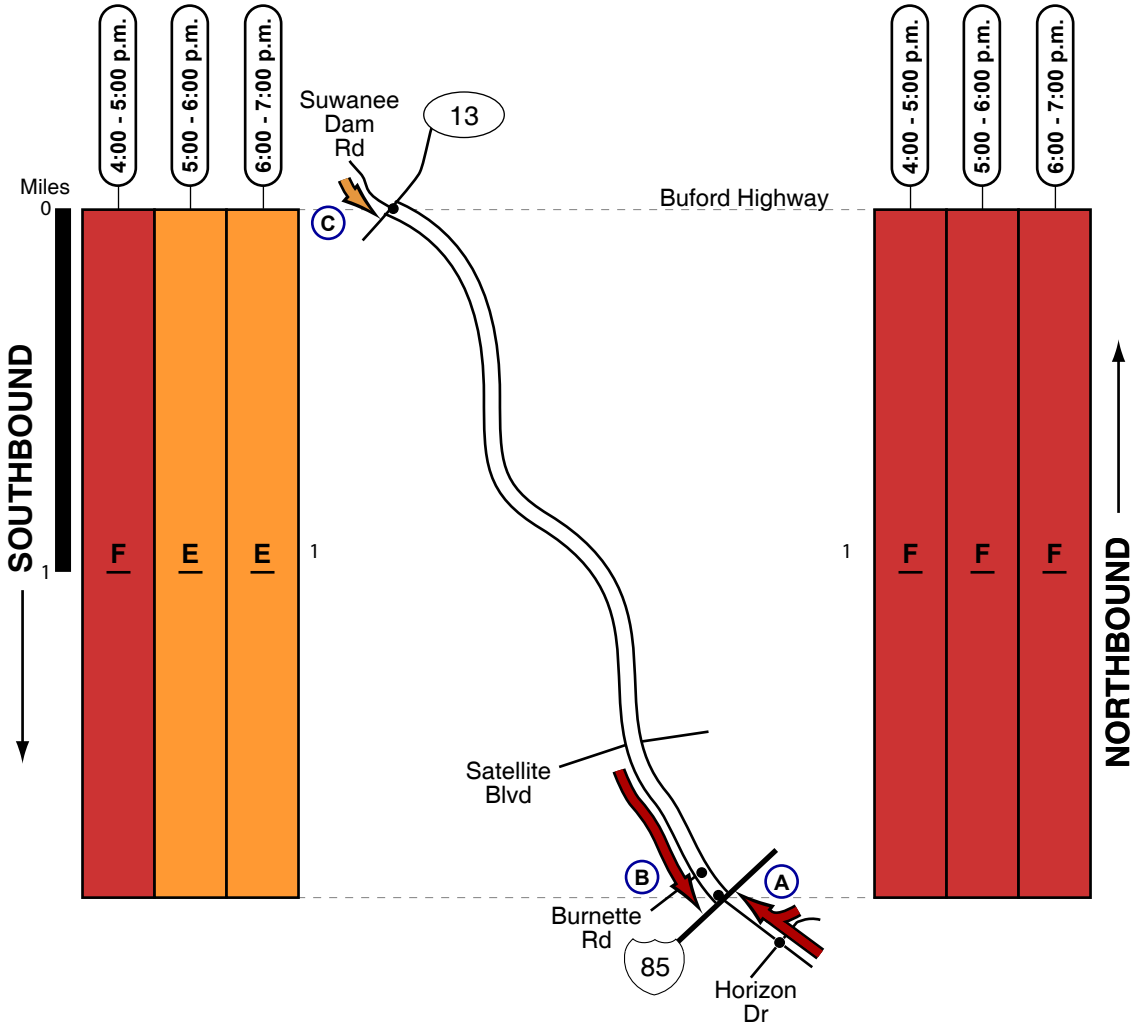
A
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent (8:30-9:30 a.m.)
Direction: Northbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Peak Hour
Direction: Southbound
Queue Population: 30 to 80 vpl
Number of Lanes: 2
Note: During two observations between 8:00 and 9:00 a.m., congestion approaching the signal at I-85 extended back to the vicinity of Satellite Blvd (a distance of approximately 1/2 mile)

C
Congestion Type: Cross Road Signal Queue
Location: SR 13
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008
SR 317 (Gwinnett County) - Evening



A
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Most Observations
Direction: Northbound
Queue Population: 30 to 55 vpl
Number of Lanes: 2
Note: During most observations, northbound congestiion on SR 317 approaching the signals at I-85 extended back through the upstream signal at Horizon Dr; westbound congestion was also found in the right lane on Horizon Dr (dedicated right-turn lane to northbound SR 317).

B
Congestion Type: Mainline Signal Queue
Location: I-85 & Burnette Rd
Frequency: Most Observations
Direction: Southbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2
Note: During the peak period, southbound congestion approaching the signal at I-85 typically extended back to the vicinity of Satellite Blvd (a distance of approximately 1/2 mile).

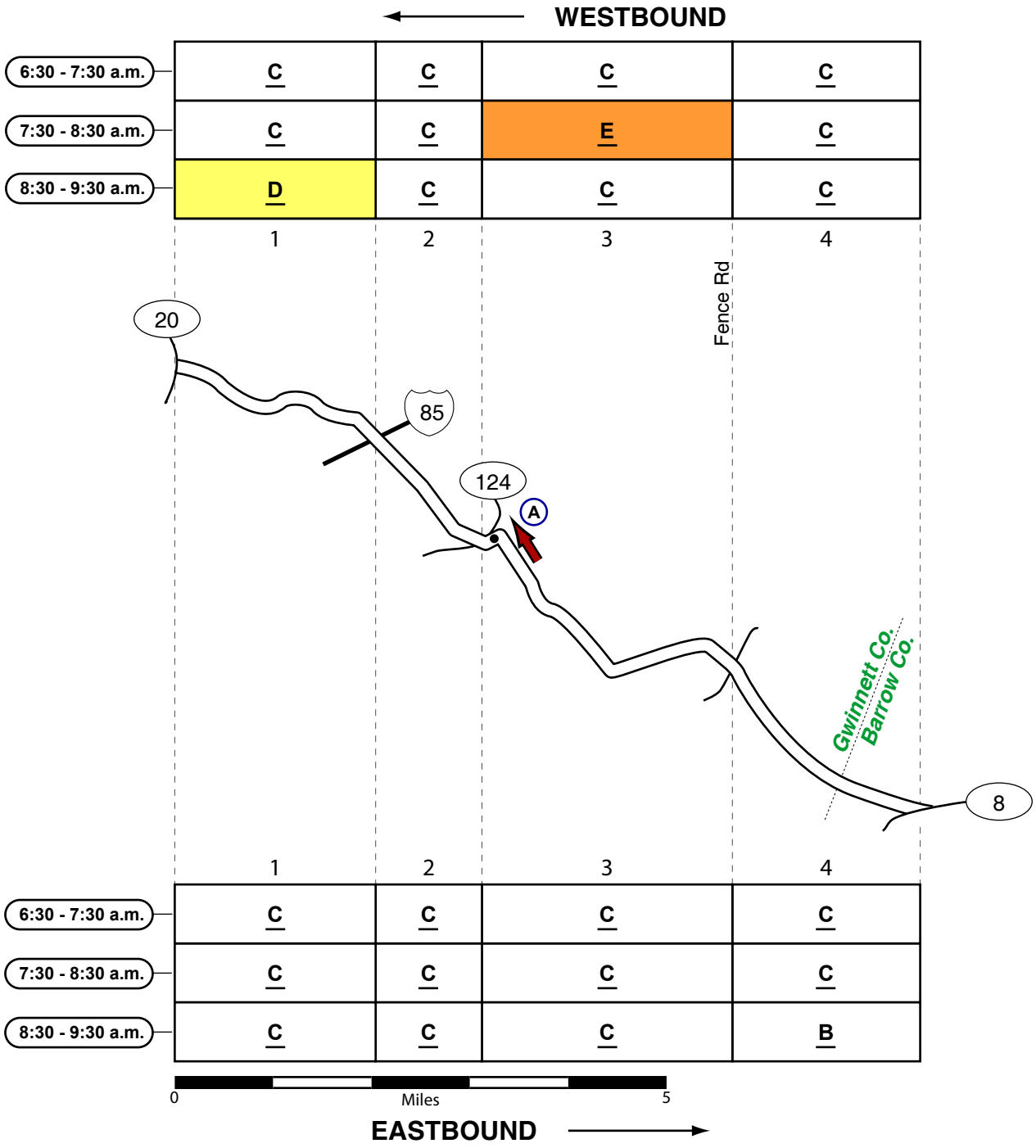
C
Congestion Type: Cross Road Signal Queue
Location: Suwanee Dam Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

(Blank)

Spring 2008

SR 324 (Gwinnett & Barrow Counties) - Morning

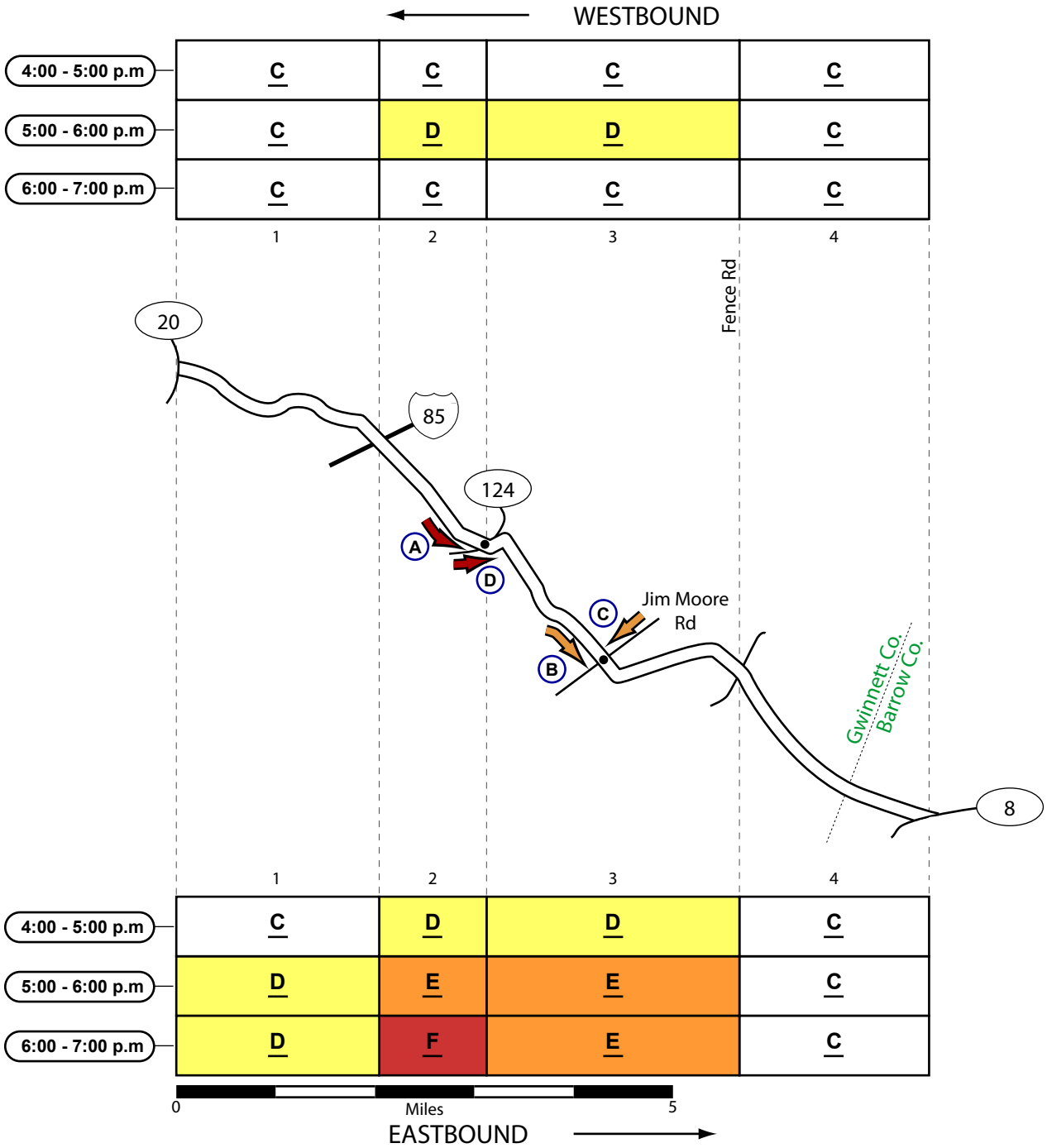


A
Congestion Type: Mainline Signal Queue
Location: SR 124
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 324 (Gwinnett & Barrow Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 324 (Gwinnett & Barrow Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 124
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: During one observation, the queue contained approximately 80 vehicles.

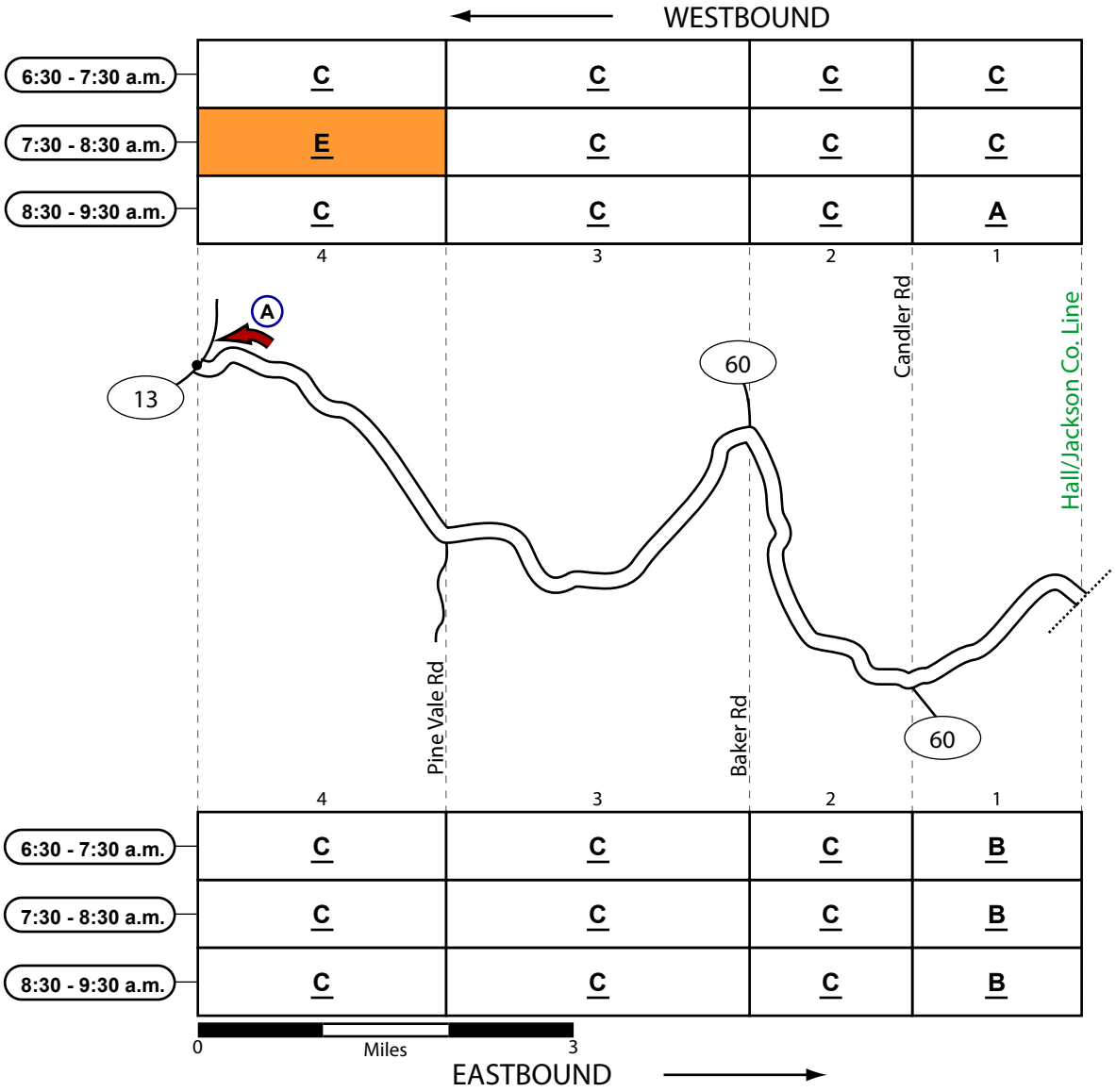
B
Congestion Type: Mainline Signal Queue
Location: Jim Moore Rd
Frequency: On some days but not others
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Signal Queue
Location: Jim Moore Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: SR 124
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

Spring 2008

SR 332 (Hall County) - Morning

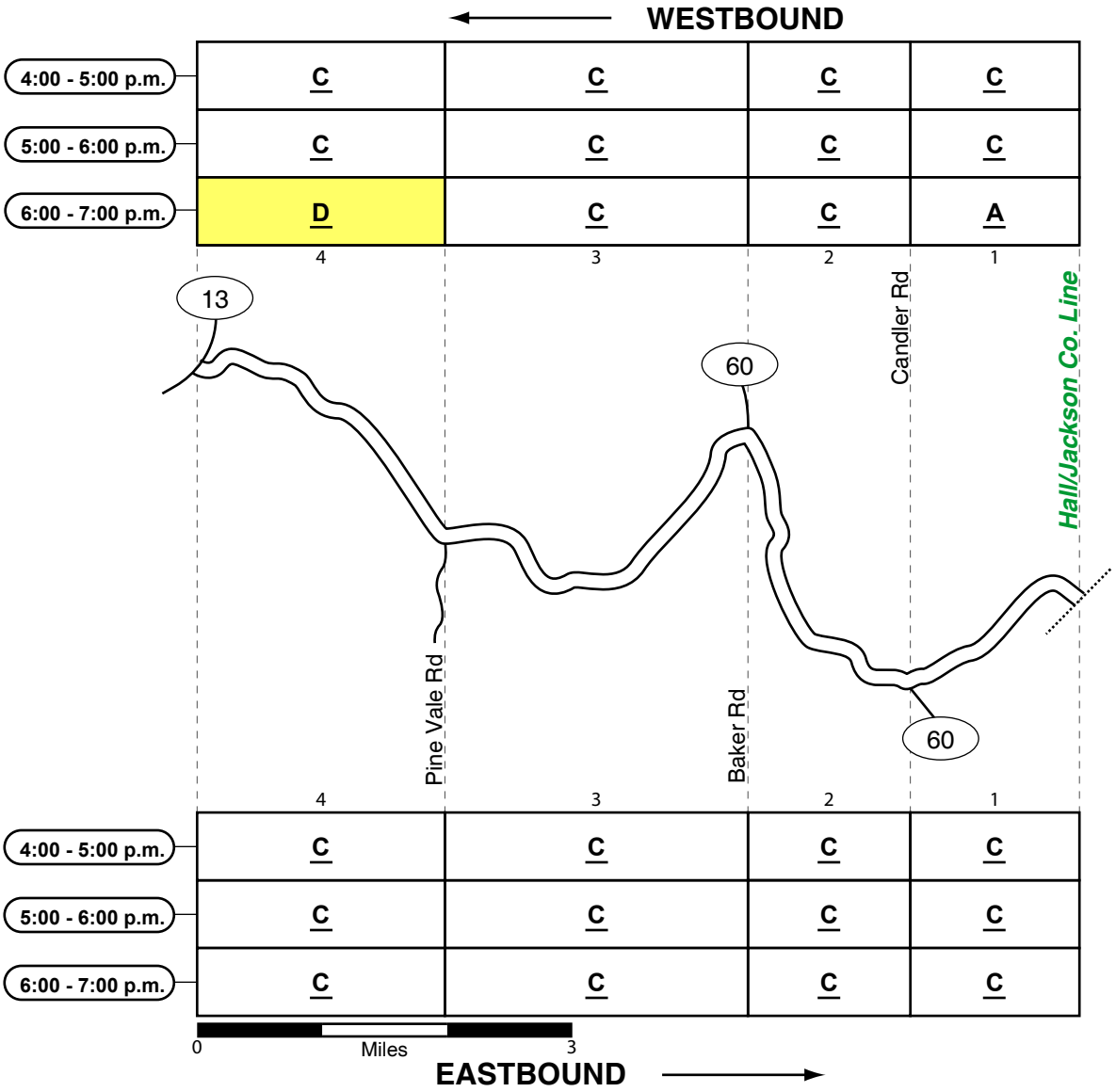


A
Congestion Type: Mainline Signal Queue
Location: SR 13
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

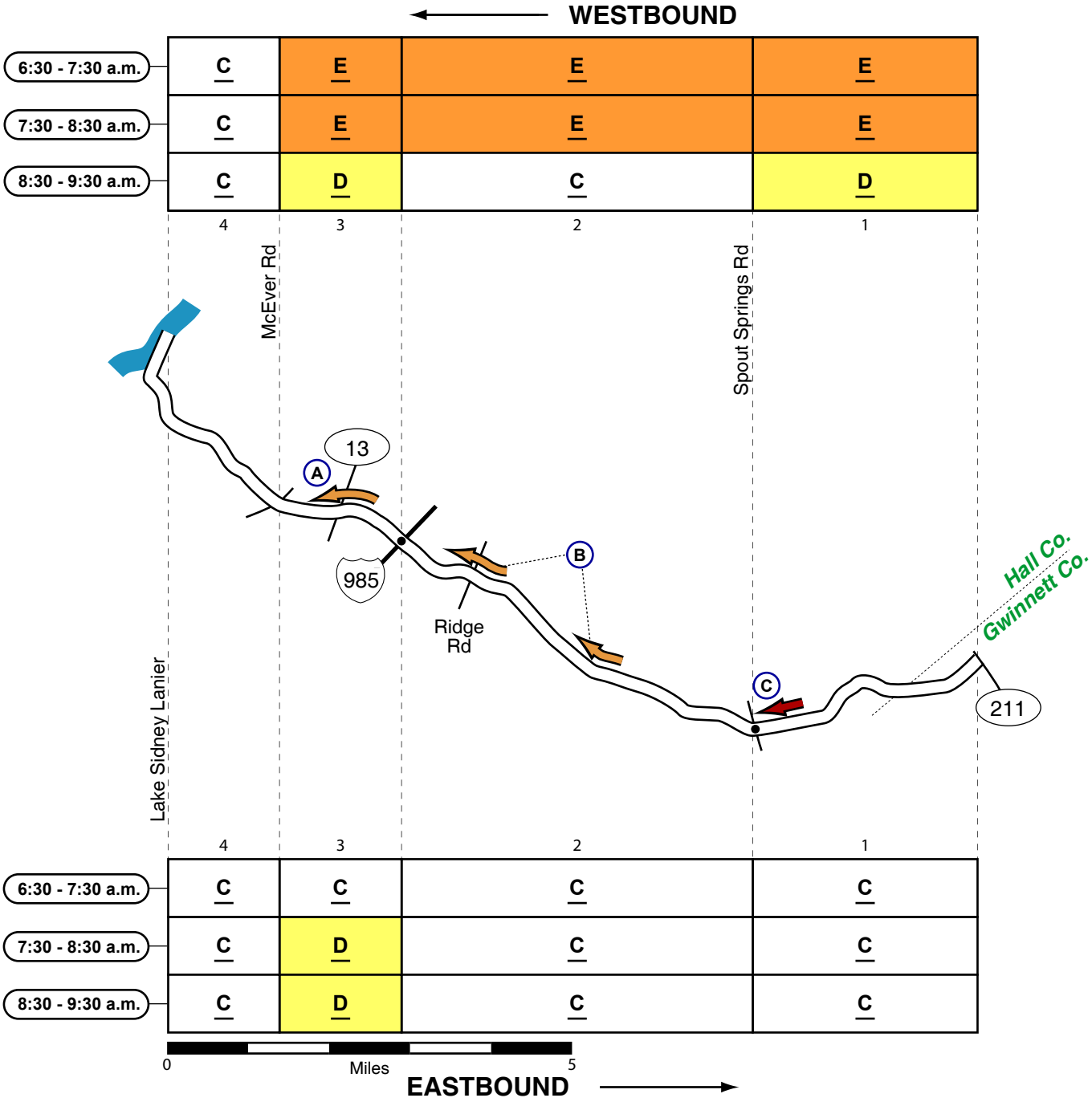
SR 332 (Hall County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 347 (Hall & Gwinnett Counties) - Morning



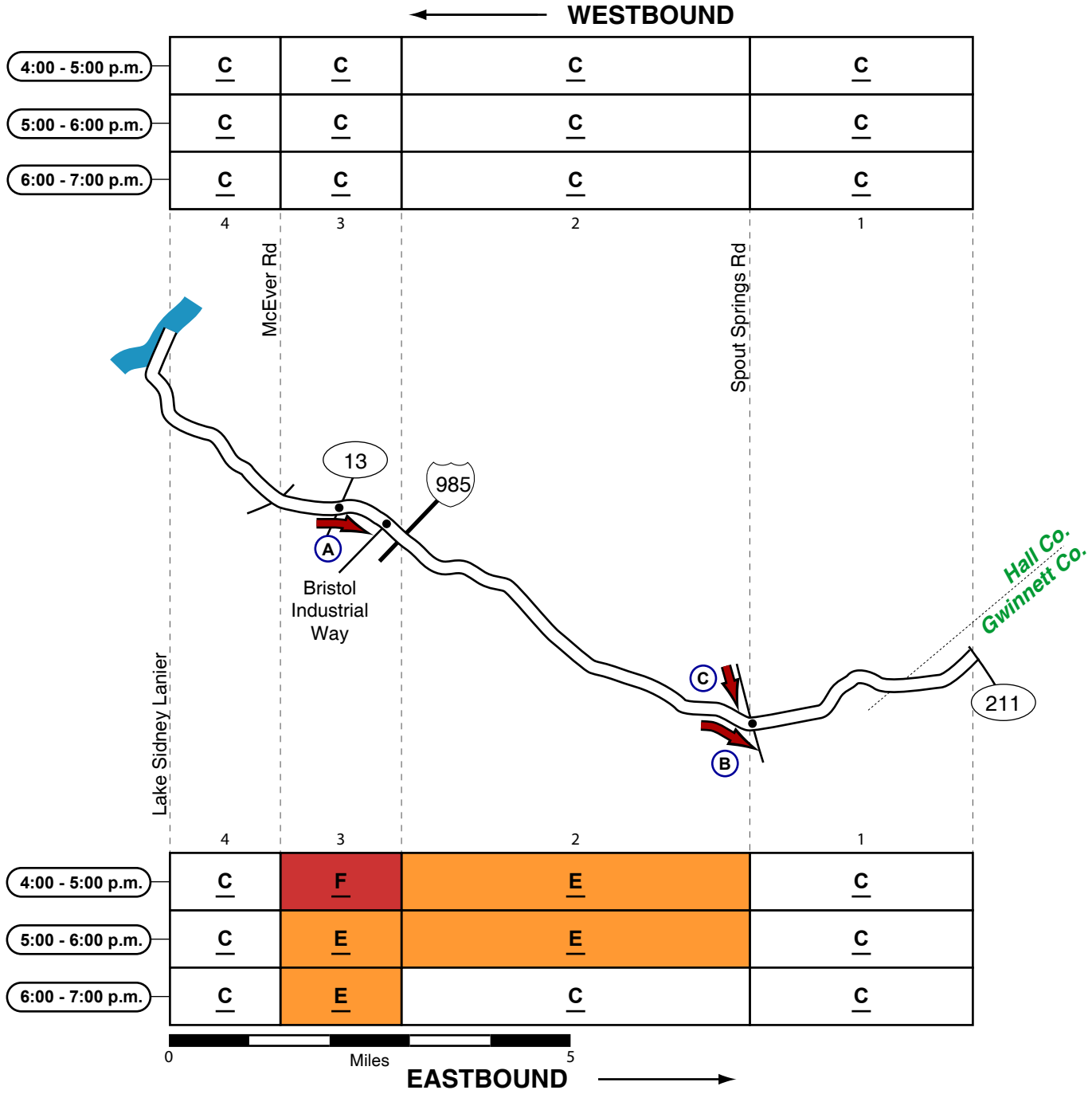
A
Congestion Type: Platoons
Location: Between I-985 & McEver Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between Spout Springs Rd & I-985
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Spout Springs Rd
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 347 (Hall & Gwinnett Counties) - Evening



A
Congestion Type: Mainline Signal Queue
Location: Bristol Industrial Way
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1
Note: On some days but not others, congestion backed through the upstream signal at SR 13.

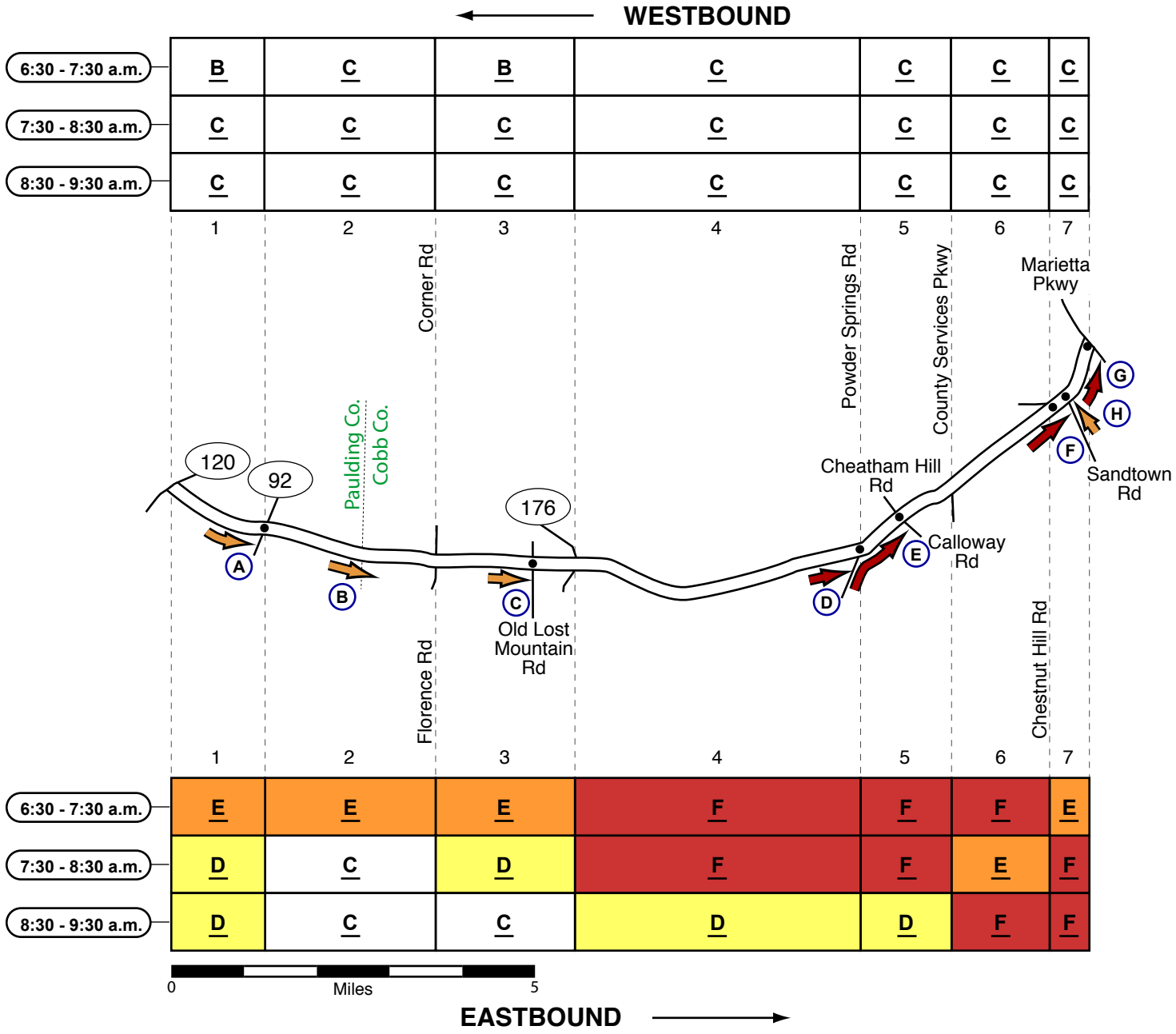
B
Congestion Type: Mainline Signal Queue
Location: Spout Springs Rd
Frequency: Most observations before 6:00 p.m.
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Signal Queue
Location: Spout Springs Rd
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 360 (Paulding & Cobb Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 360 (Paulding & Cobb Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Platoons
Location: Between SR 92 & Florence Rd
Frequency: Most observations before 7:30 a.m.
Direction: Eastbound
Platoon Population: 25 to 55 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Old Lost Mountain Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Powder Springs Rd & John Ward Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Cheatham Hill Rd
Frequency: Most observations
Direction: Eastbound
Number of Lanes: 2
Note: During the peak period, a 1/2 to 1 mile zone of congestion was found approaching the signal at Cheatham Rd; congestion typically extended back through the upstream signals at Oxford Rd and Powder Springs Rd.

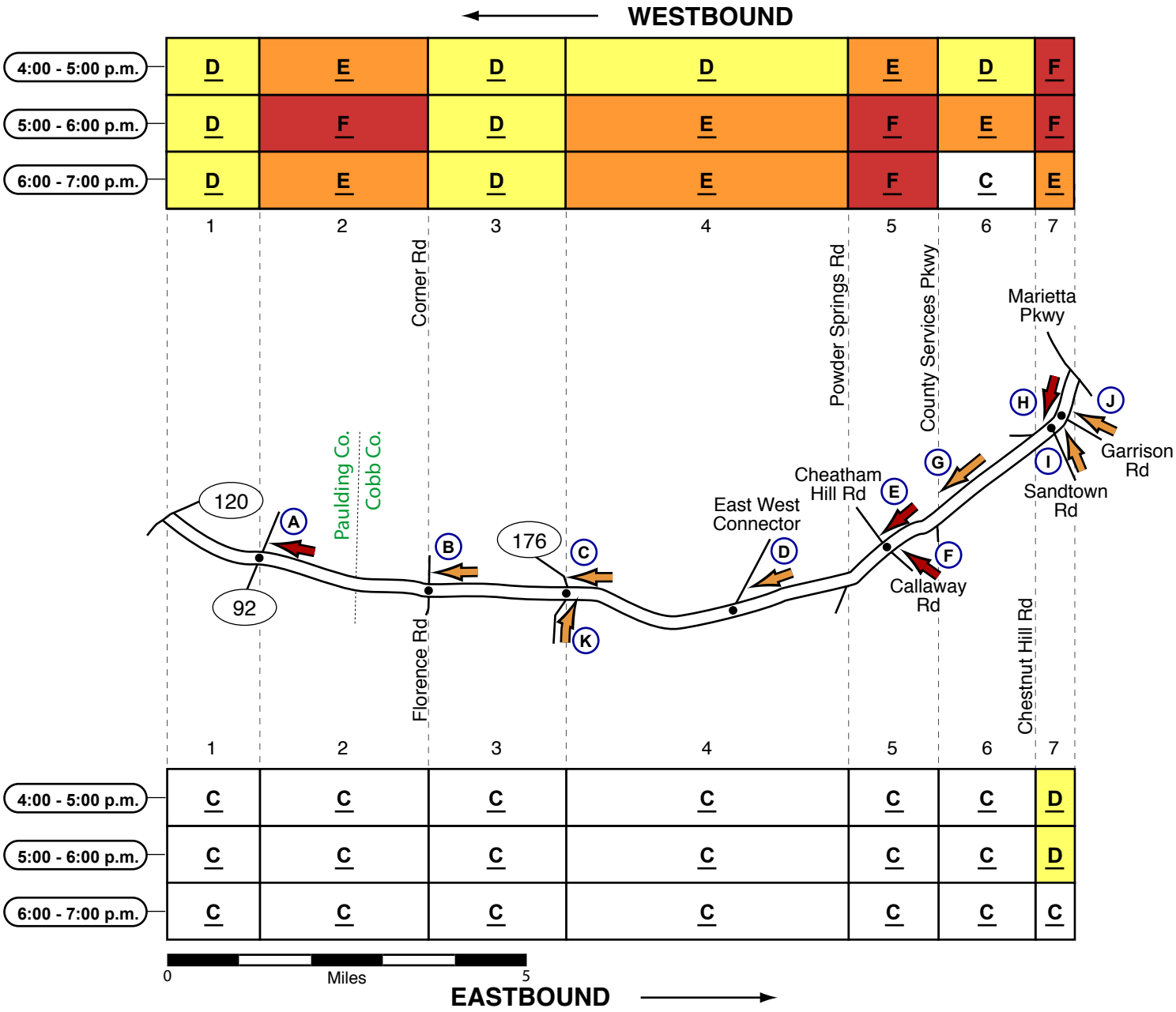
F
Congestion Type: Mainline Signal Queue
Location: Chestnut Hill Rd & Sandtown Rd
Frequency: Most observations
Direction: Eastbound
Queue Population: 30 to 80 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Marietta Parkway
Frequency: Most observations after 7:30 a.m.
Direction: Eastbound
Queue Population: 25 to 55 vpl
Number of Lanes: 2

H
Congestion Type: Cross Road Signal Queue
Location: Sandtown Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 360 (Paulding & Cobb Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 360 (Paulding & Cobb Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: SR 92
Frequency: Most observations
Direction: Westbound
Queue Population: 25 to 45 vpl
Number of Lanes: 1
Note: During one observation (March 13th at 5:23 p.m.), approximately 75 vehicles were queued at the signal.

B
Congestion Type: Mainline Signal Queue
Location: Corner Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 176
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: East-West Connector
Frequency: Intermittent
Direction: Westbound
Queue Population: 40 to 60 vpl
Number of Lanes: 2

E
Congestion Type: Mainline Signal Queue
Location: Cheatham Hill Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 25 to 65 vpl
Number of Lanes: 2
Note: During one observation (March 13th at 5:37 p.m.), approximately 120 vehicles per lane were queued at the signal.

F
Congestion Type: Cross Road Signal Queue
Location: Callaway Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion was typically more severe in the left-turn lane.

G
Congestion Type: Platoons
Location: Between Chestnut Hill Rd and County Services Parkway
Frequency: Peak Hour
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

H
Congestion Type: Mainline Signal Queue
Location: Sandtown Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 35 to 75 vpl
Number of Lanes: 2
Note: During some observations, congestion backed through the upstream signals at Garrison Rd and Gramling St.

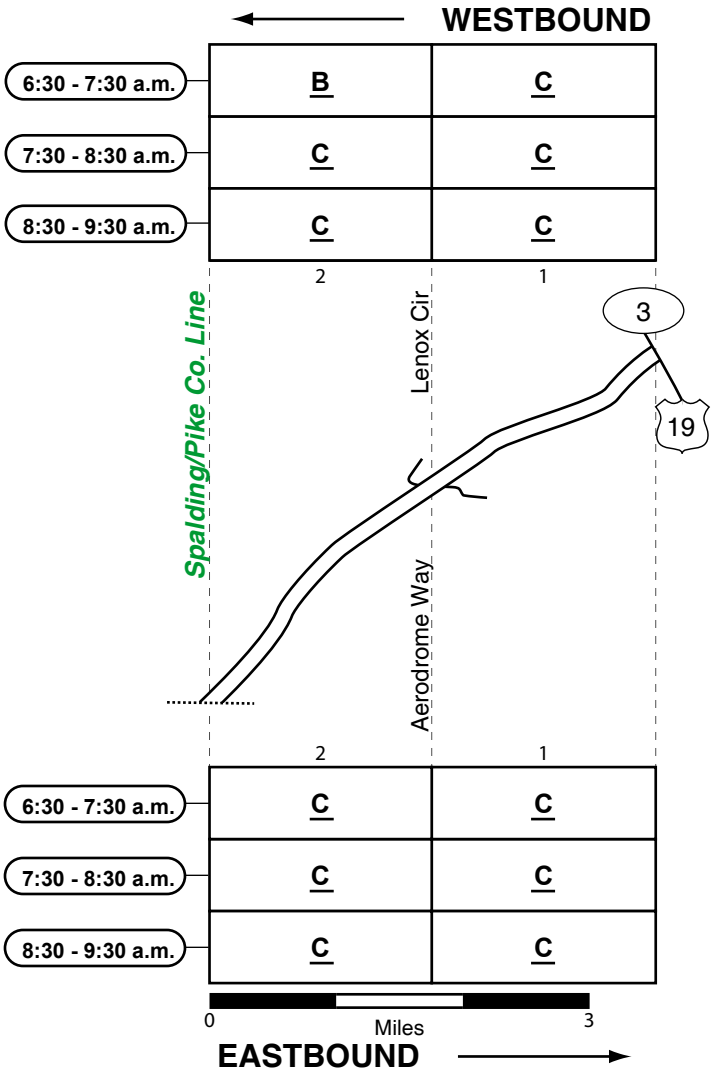
I
Congestion Type: Cross Road Signal Queue
Location: Sandtown Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1
Note: Congestion was typically limited to the left lane (left-turn and through).

J
Congestion Type: Cross Road Signal Queue
Location: Garrison Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

K
Congestion Type: Cross Road Signal Queue
Location: SR 176
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 1
(per 2007 data/analysis)

Spring 2008

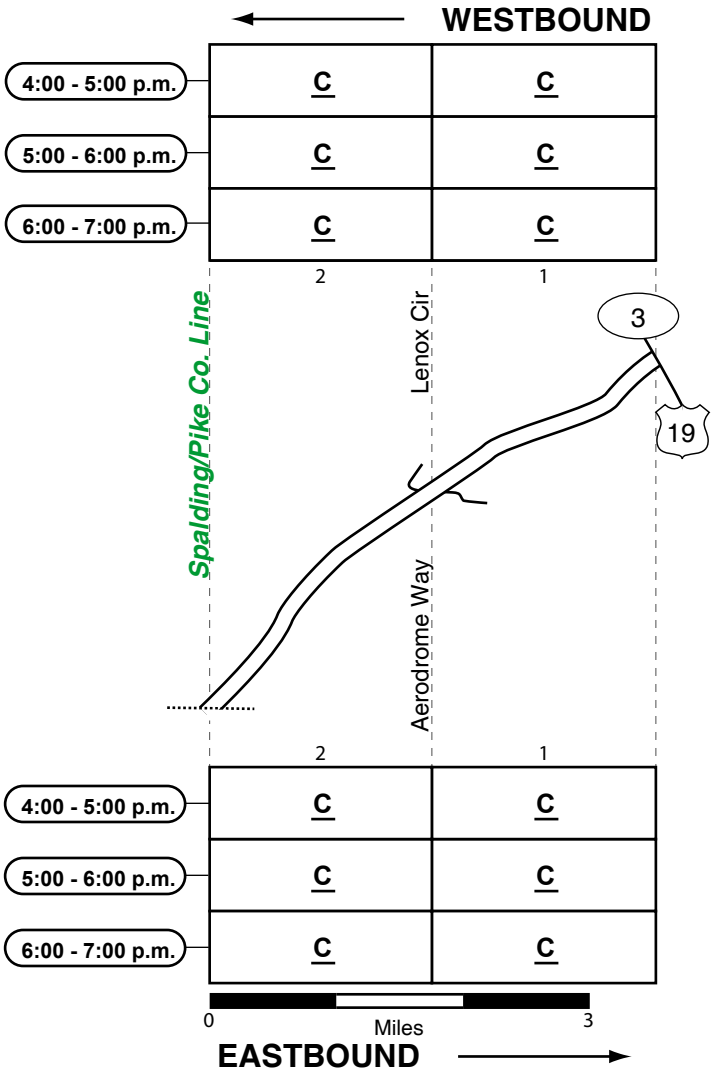
SR 362 (Spalding County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

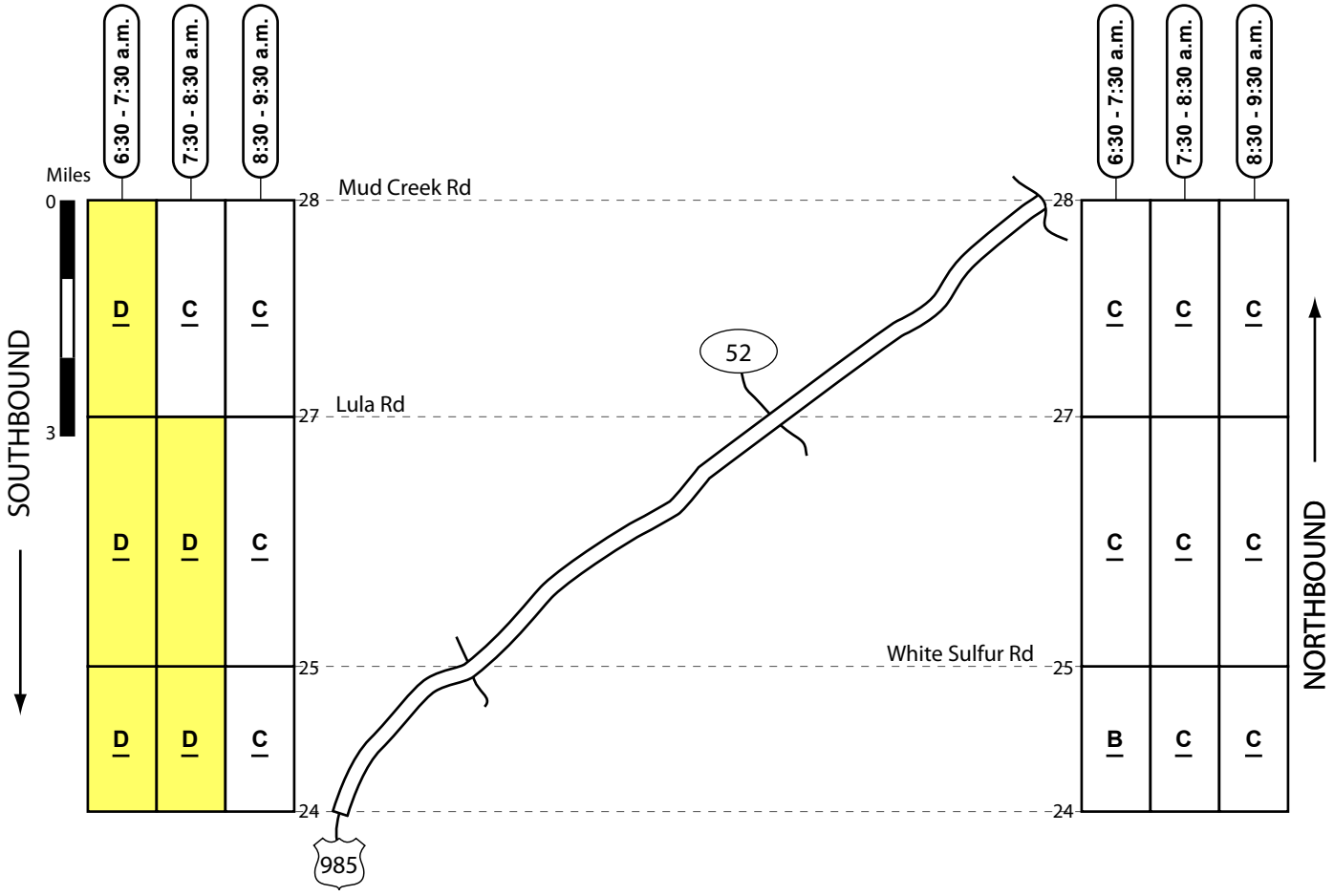
SR 362 (Spalding County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

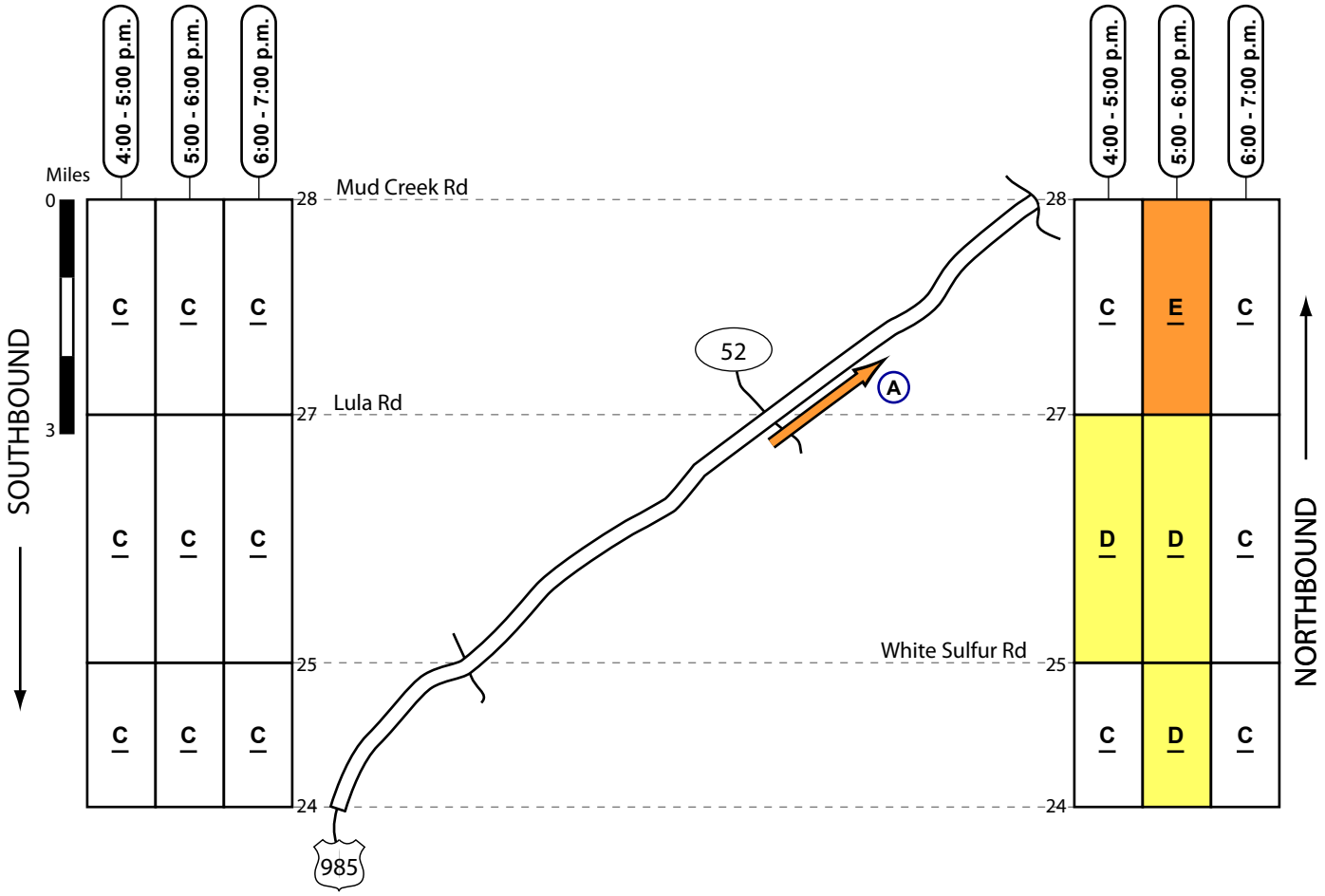
Fall 2007

SR 365/US 23 (Hall County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Fall 2007
SR 365/US 23 (Hall County) - Evening

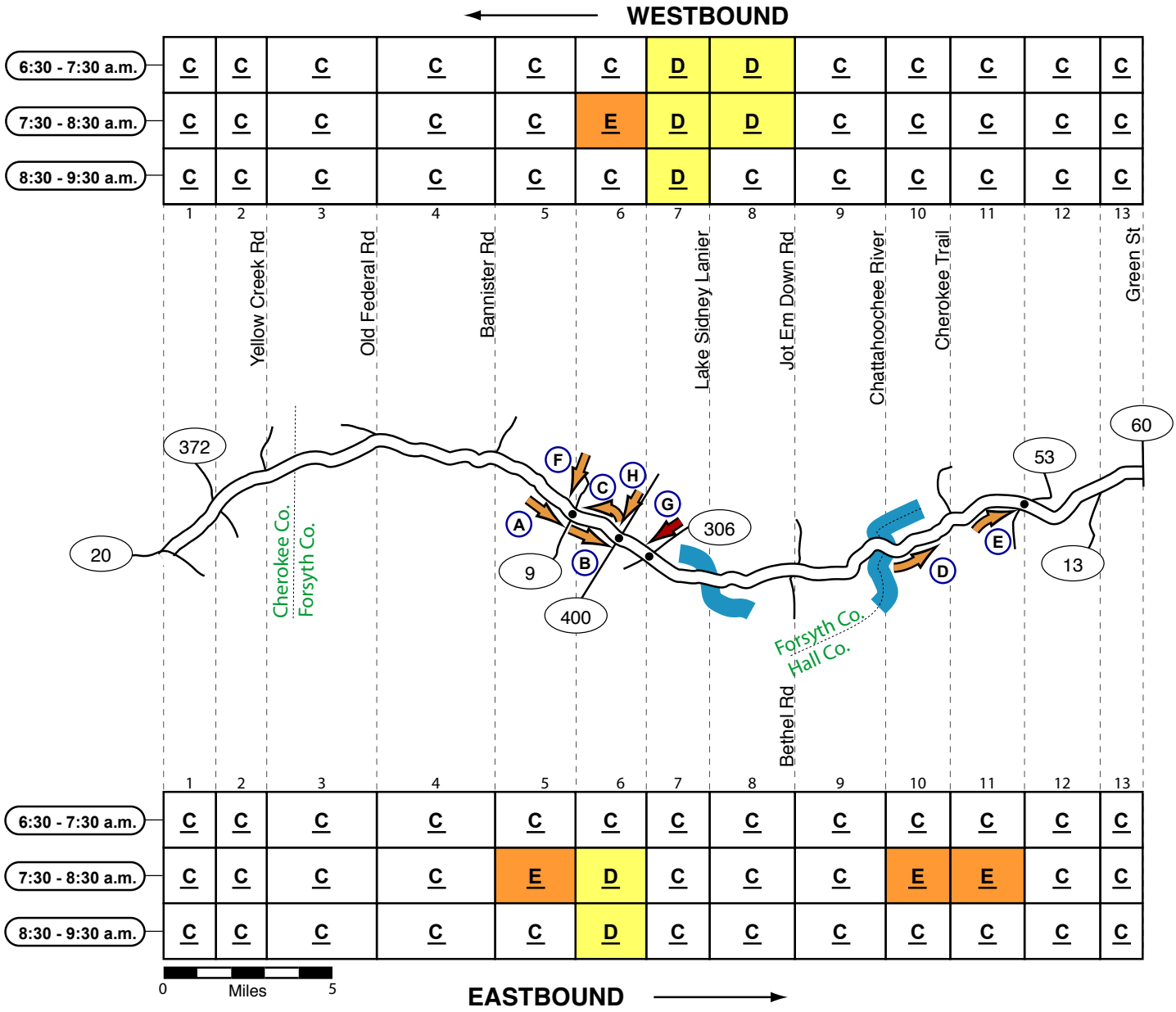


A
Congestion Type: Platoons
Location: Between SR 52 & Mud Creek Rd
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 369 (Cherokee/Forsyth & Hall Counties) - Morning



	1	2	3	4	5	6	7	8	9	10	11	12	13
6:30 - 7:30 a.m.	C	C	C	C	C	C	D	D	C	C	C	C	C
7:30 - 8:30 a.m.	C	C	C	C	C	E	D	D	C	C	C	C	C
8:30 - 9:30 a.m.	C	C	C	C	C	C	D	C	C	C	C	C	C

	1	2	3	4	5	6	7	8	9	10	11	12	13
6:30 - 7:30 a.m.	C	C	C	C	C	C	C	C	C	C	C	C	C
7:30 - 8:30 a.m.	C	C	C	C	E	D	C	C	C	E	E	C	C
8:30 - 9:30 a.m.	C	C	C	C	C	D	C	C	C	C	C	C	C

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 369 (Cherokee/Forsyth & Hall Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Eastbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Westbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between the Chattahoochee River & Cherokee Trail
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: SR 53
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

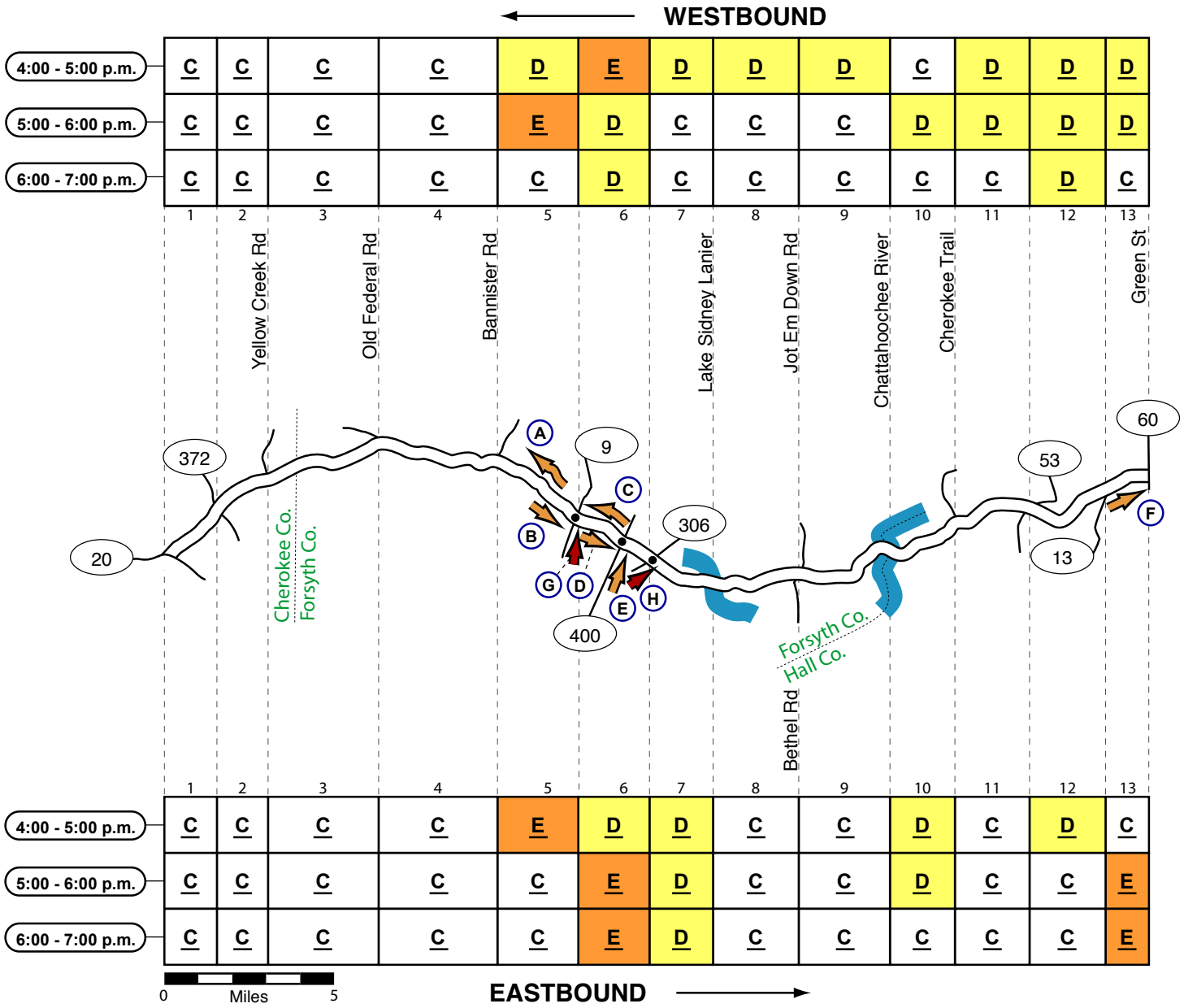
F
Congestion Type: Cross Road Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Southbound
Queue Population: 35 to 45 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: SR 306
Frequency: Most observations before 8:00 a.m.
Direction: Westbound
Queue Population: 20 to 55 vpl
Number of Lanes: 1

H
Congestion Type: Cross Road Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Spring 2008

SR 369 (Cherokee/Forsyth & Hall Counties) - Evening



	1	2	3	4	5	6	7	8	9	10	11	12	13
4:00 - 5:00 p.m.	C	C	C	C	D	E	D	D	D	C	D	D	D
5:00 - 6:00 p.m.	C	C	C	C	E	D	C	C	C	D	D	D	D
6:00 - 7:00 p.m.	C	C	C	C	C	D	C	C	C	C	C	D	C

	1	2	3	4	5	6	7	8	9	10	11	12	13
4:00 - 5:00 p.m.	C	C	C	C	E	D	D	C	C	D	C	D	C
5:00 - 6:00 p.m.	C	C	C	C	C	E	D	C	C	D	C	C	E
6:00 - 7:00 p.m.	C	C	C	C	C	E	D	C	C	C	C	C	E

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 369 (Cherokee/Forsyth & Hall Counties) - Evening

A
Congestion Type: Platoons
Location: Between SR 9 & Bannister Rd
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Eastbound
Queue Population: 25 to 35 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1
Note: During one observation (March 13th at 5:30 p.m.), approximately 50 vehicles were queued at the signal.

E
Congestion Type: Cross Road Signal Queue
Location: SR 400
Frequency: Intermittent
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 2

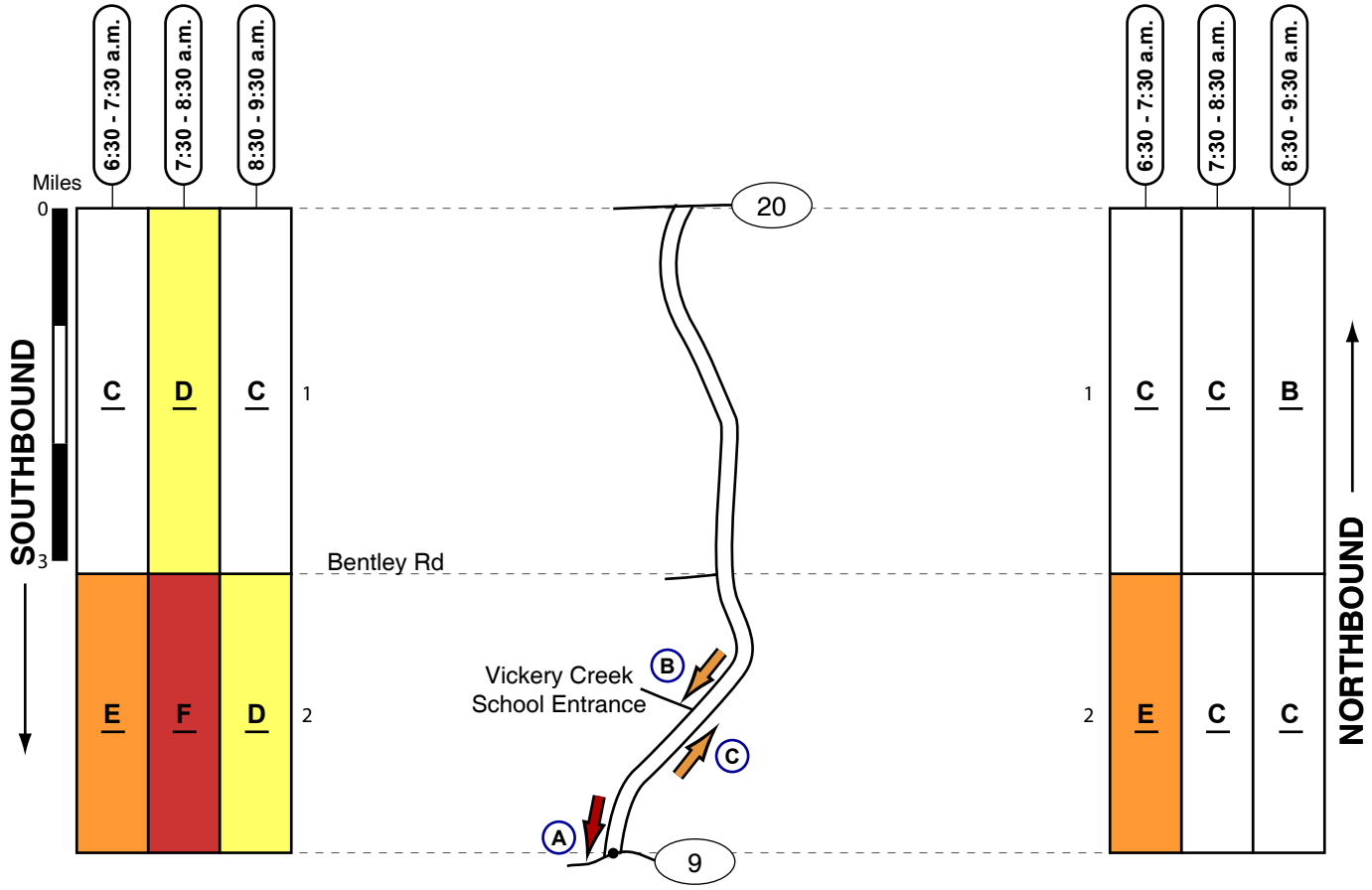
F
Congestion Type: Platoons
Location: Between SR 13 & SR 60
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2

G
Congestion Type: Cross Road Signal Queue
Location: SR 9
Frequency: Peak Hour
Direction: Northbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

H
Congestion Type: Cross Road Signal Queue
Location: SR 306
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

Spring 2008

SR 371 (Forsyth County) - Morning



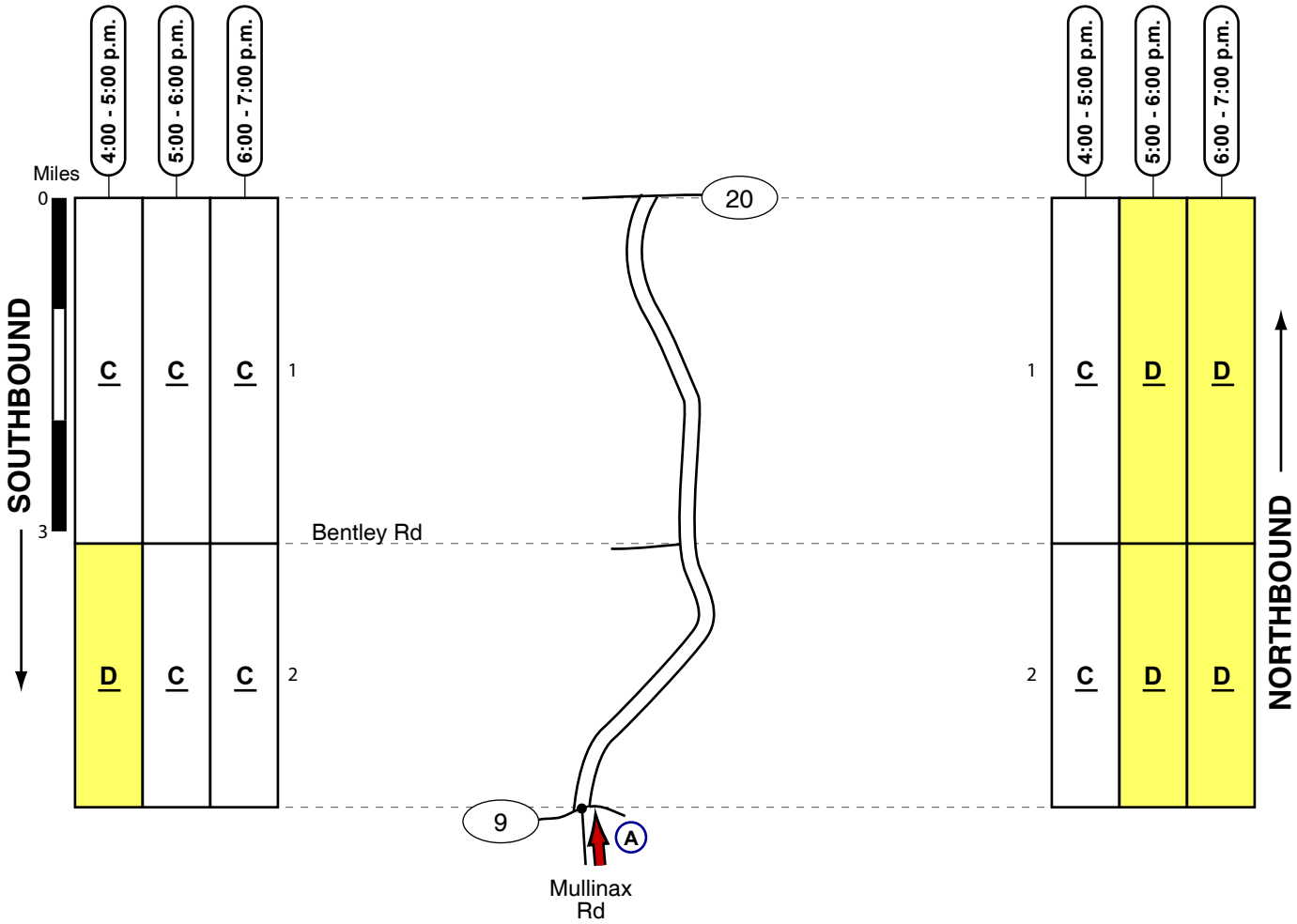
A
Congestion Type: Mainline Signal Queue
Location: SR 9
Frequency: Most observations
Direction: Southbound
Queue Population: 25 to 50 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Queue
(School Entrance)
Location: Vickery Creek School Entrance
Frequency: Between 7:00 and 7:30 a.m.
Direction: Southbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Queue
(School Entrance)
Location: Vickery Creek School Entrance
Frequency: Between 7:00 and 7:30 a.m.
Direction: Northbound
Queue Population: 30 to 40 vpl
Number of Lanes: 1

Spring 2008

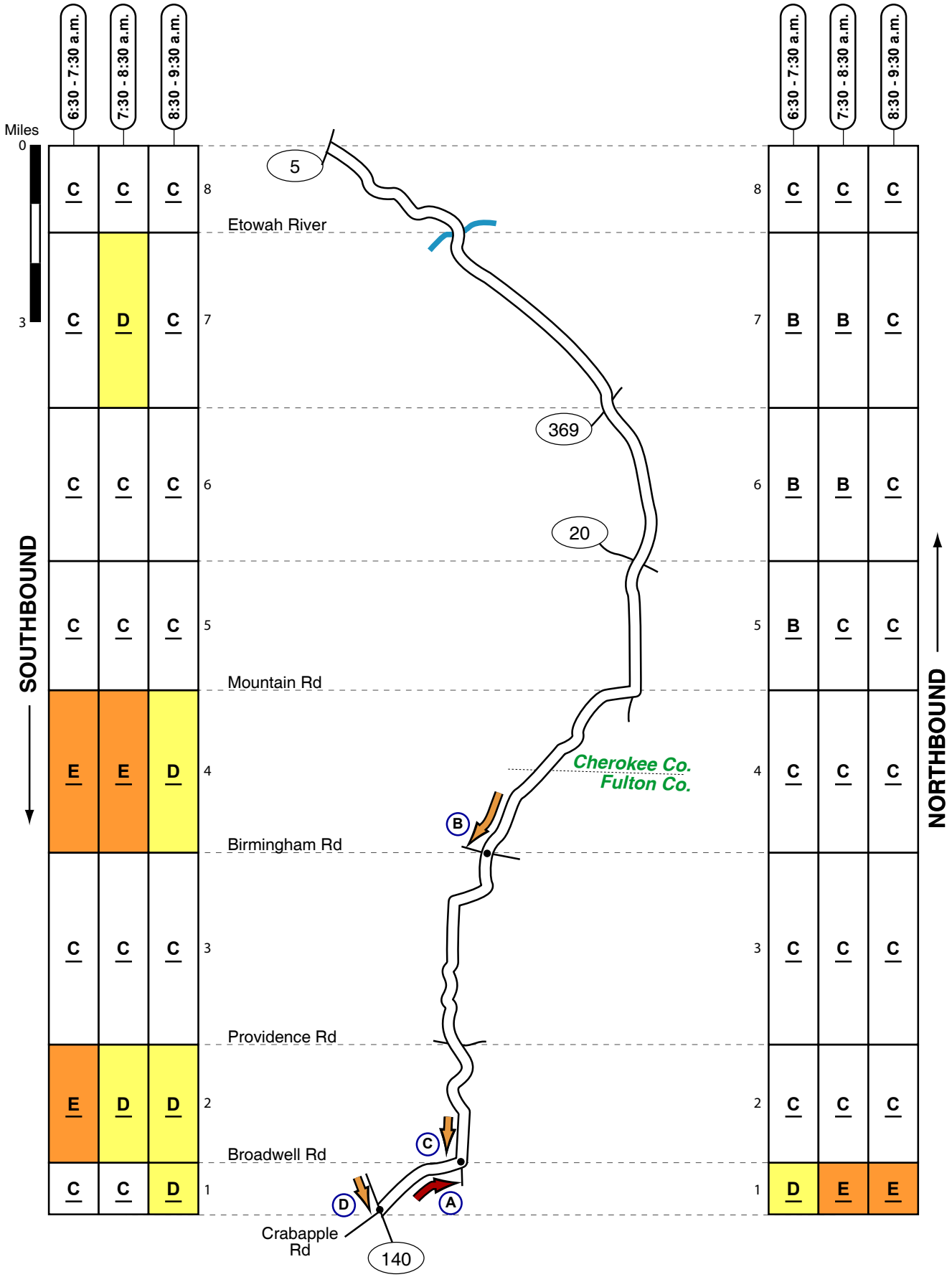
SR 371 (Forsyth County) - Evening



A
Congestion Type: Cross Road Signal Queue
Location: Mullinax Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

Spring 2008

SR 372 (Cherokee & Fulton Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 372 (Cherokee & Fulton Counties) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Broadwell Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

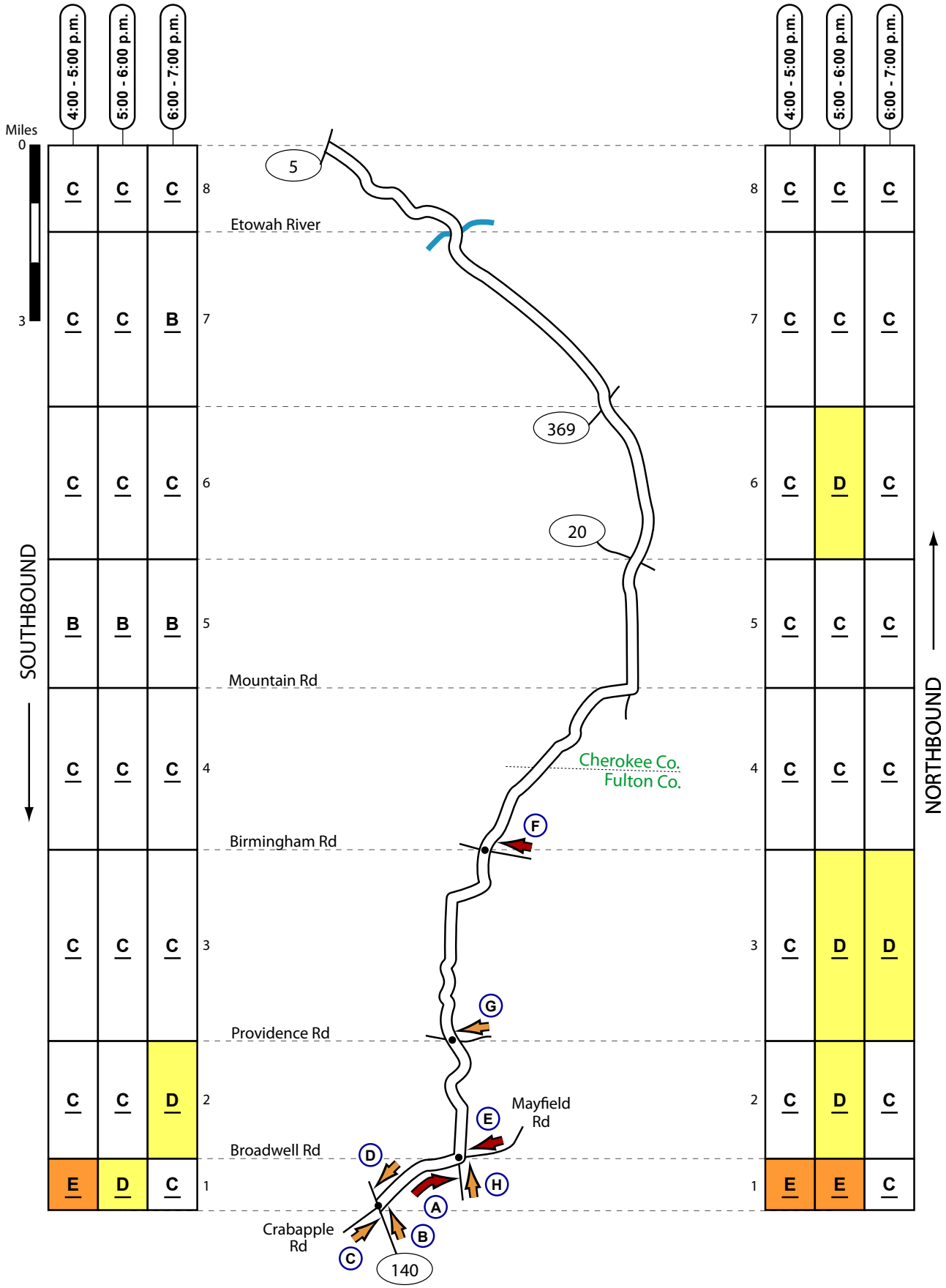
B
Congestion Type: Mainline Signal Queue
Location: Birmingham Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Broadwell Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

Spring 2008

SR 372 (Cherokee & Fulton Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 372 (Cherokee & Fulton Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Broadwell Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

B
Congestion Type: Cross Road Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

C
Congestion Type: Cross Road Signal Queue
Location: Crabapple Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Mayfield Rd
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

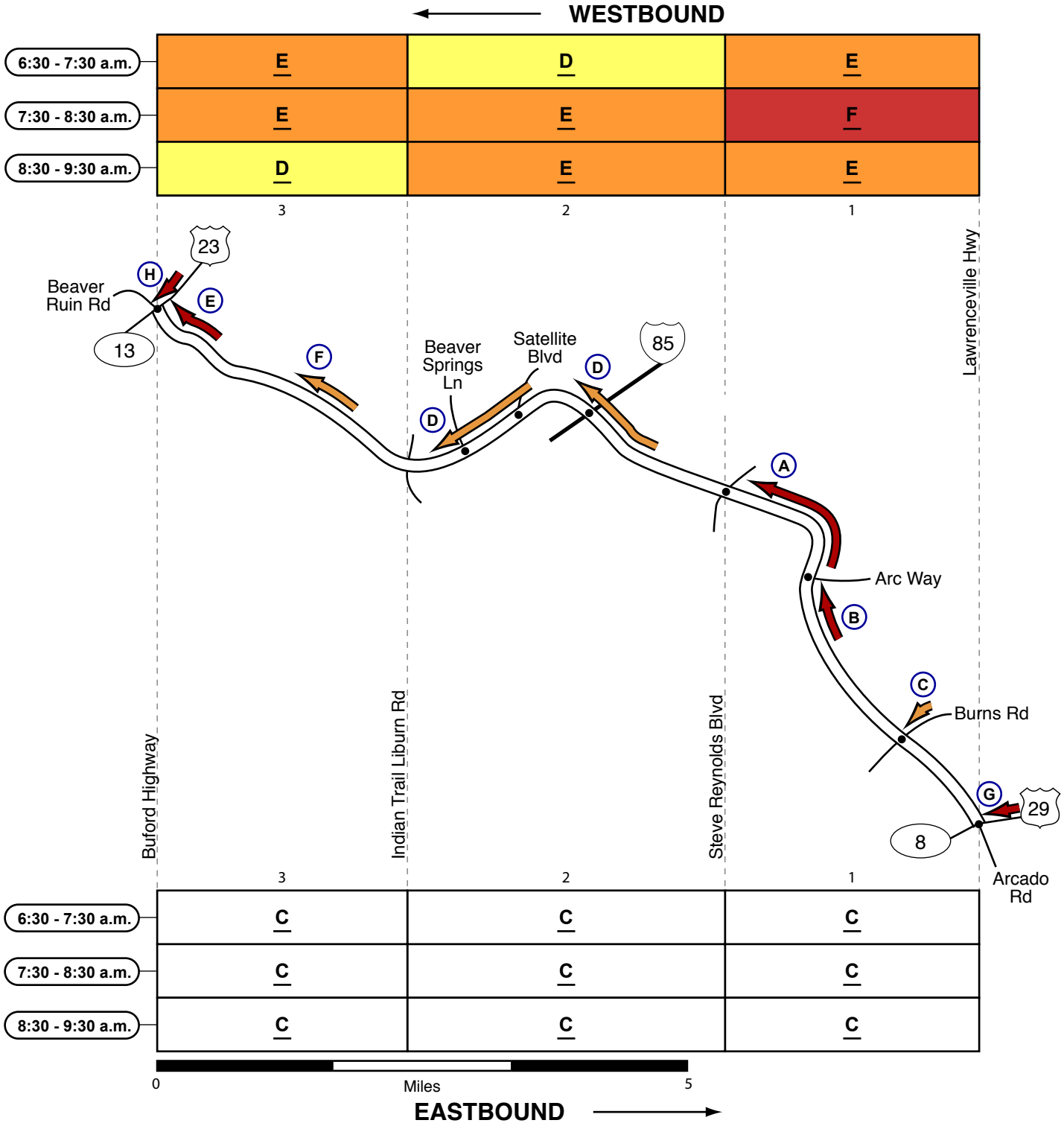
F
Congestion Type: Cross Road Signal Queue
Location: Birmingham Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: Providence Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

H
Congestion Type: Cross Road Signal Queue
Location: Broadwell Rd
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

Spring 2008

SR 378 (Gwinnett County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 378 (Gwinnett County) - Morning

A
Congestion Type: Mainline Signal Queue
Location: Steve Reynolds Blvd
Frequency: Most observations
Direction: Westbound
Queue Population: 30 to 70 vpl
Number of Lanes: 2

B
Congestion Type: Mainline Signal Queue
Location: Arc Way
Frequency: Peak Hour
Direction: Westbound
Queue Population: 30 to 60 vpl
Number of Lanes: 2

C
Congestion Type: Cross Road Signal Queue
Location: Burns Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

D
Congestion Type: Platoons
Location: Between Steve Reynolds Blvd & Indian Trail Liburn Rd
Frequency: Most observations
Direction: Westbound
Platoon Population: 25 to 40 vpl
Number of Lanes: 2
Note: Intermittently, congestion was found approaching the signals at I-85, Beaver Springs Ln and Indian Trail Liburn Rd.

E
Congestion Type: Mainline Signal Queue
Location: SR 13
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 55 vpl
Number of Lanes: 2

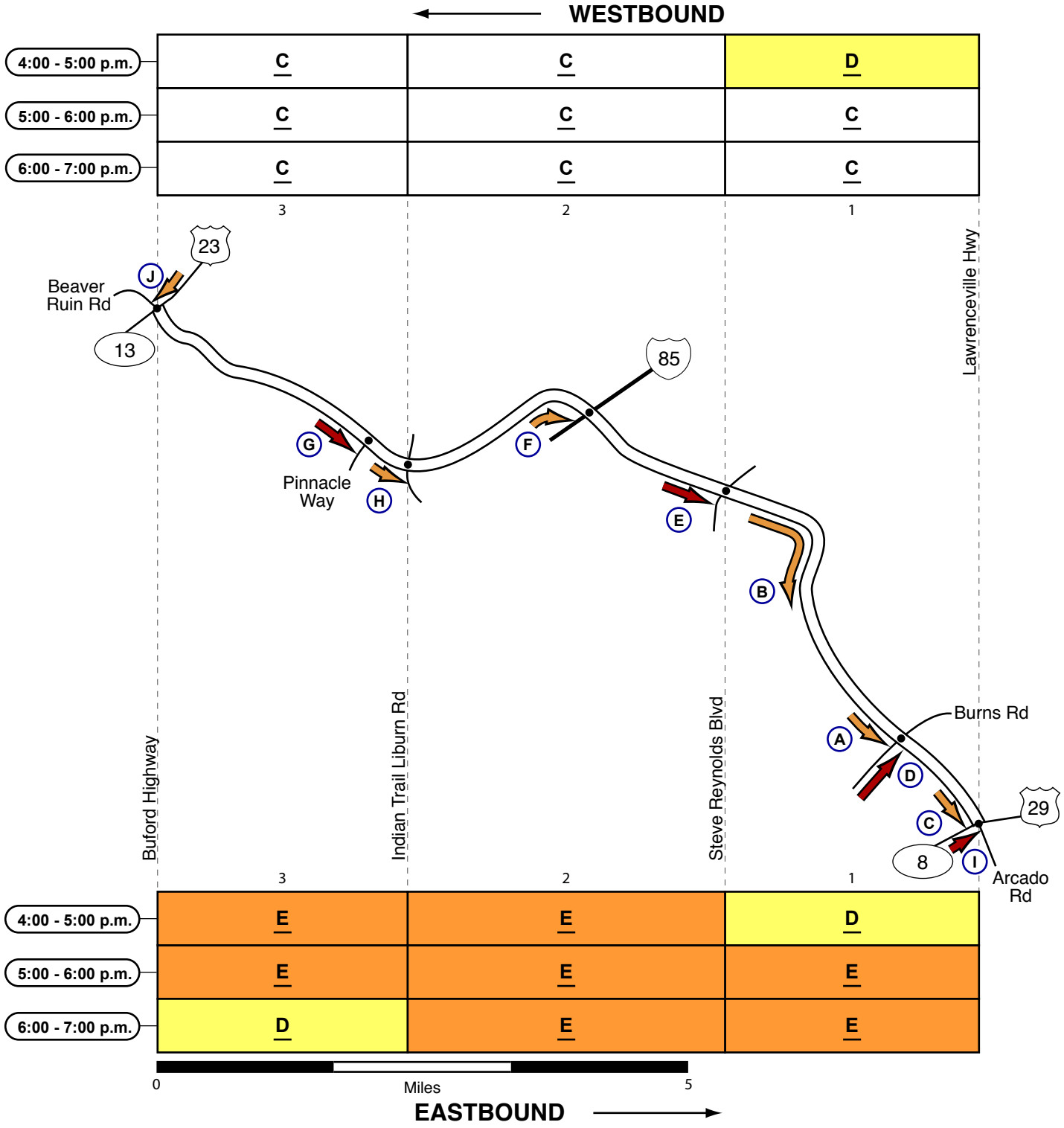
F
Congestion Type: Platoons
Location: Between Indian Trail Liburn Rd & SR 13
Frequency: Intermittent
Direction: Westbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

G
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Most observations
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 2

H
Congestion Type: Cross Road Signal Queue
Location: SR 13
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

Spring 2008

SR 378 (Gwinnett County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Spring 2008

SR 378 (Gwinnett County) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Burns Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 2

B
Congestion Type: Platoons
Location: Between Steve Reynolds Blvd & SR 8
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 2

C
Congestion Type: Left-Turn Queue
Location: SR 8
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 35 vpl
Number of Lanes: 1
Note: During some observations, congestion in the left-turn bay extended back into the left lane on SR 378.

D
Congestion Type: Cross Road Signal Queue
Location: Burns Rd
Frequency: Most Observations
Direction: Eastbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

E
Congestion Type: Mainline Signal Queue
Location: Steve Reynolds Blvd
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

F
Congestion Type: Mainline Signal Queue
Location: I-85
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

G
Congestion Type: Mainline Signal Queue
Location: Pinnacle Way
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

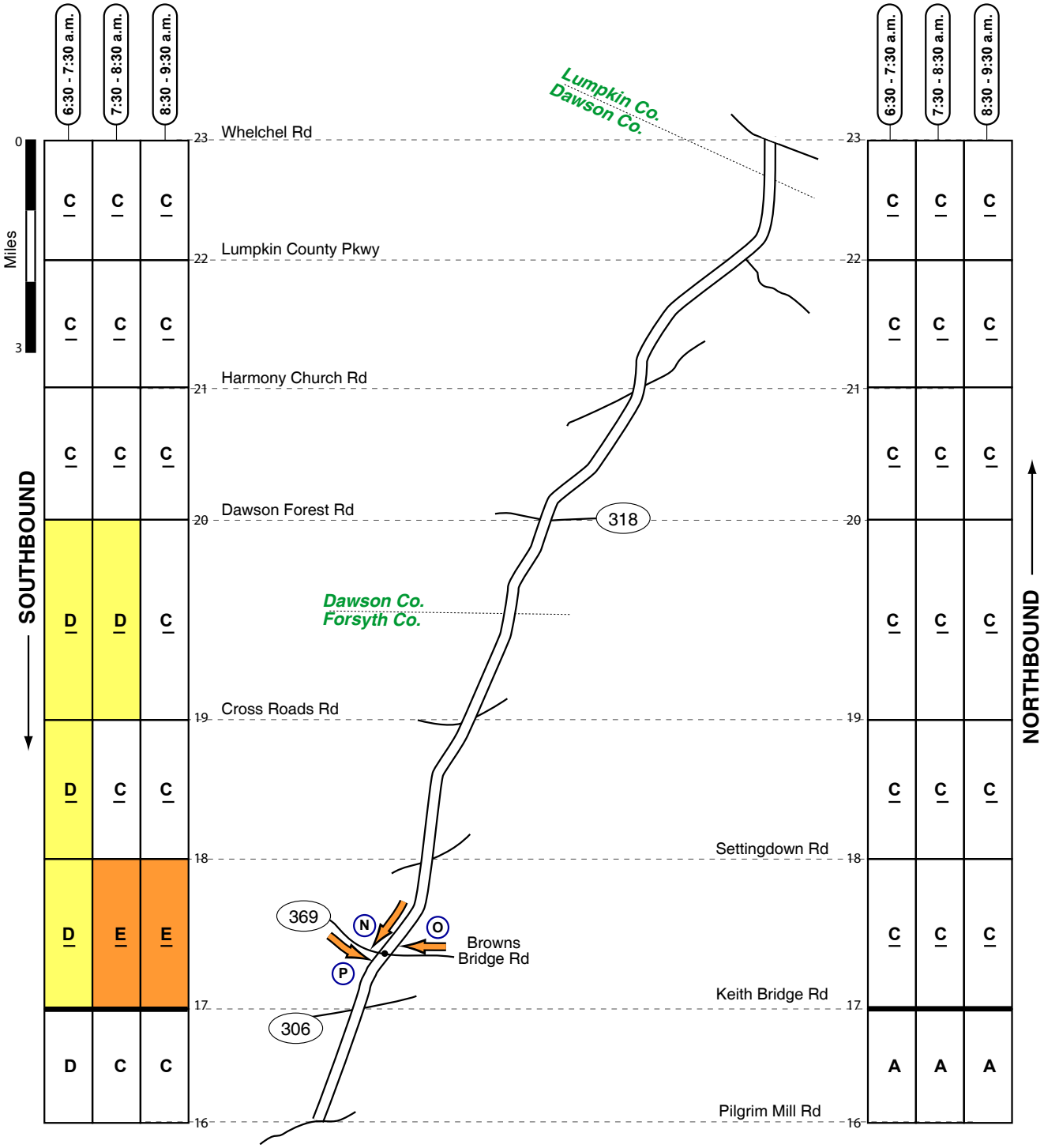
H
Congestion Type: Mainline Signal Queue
Location: Indian Trail Liburn Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 25 vpl
Number of Lanes: 2

I
Congestion Type: Cross Road Signal Queue
Location: SR 8
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 2

J
Congestion Type: Left-Turn Queue
Location: SR 13
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1
Note: When congested, congestion in the left-turn bay extended back into the right lane on SR 13.

Fall 2007

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Morning

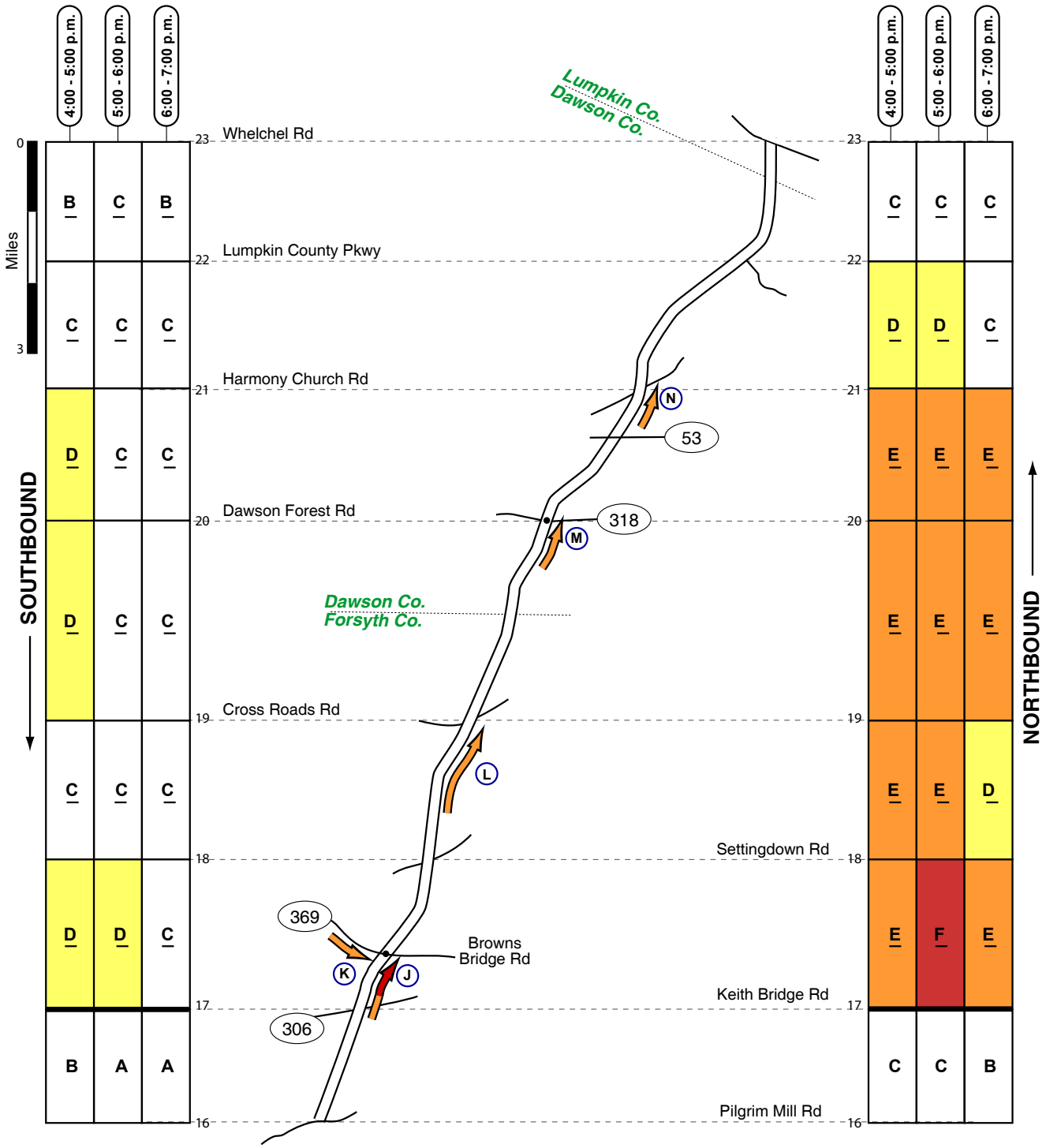
N
Congestion Type: Signal Queue
Location: SR 369 (Browns Bridge Rd)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2

O
Congestion Type: Congested Cross Road
Location: SR 369 (Browns Bridge Rd)
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

P
Congestion Type: Congested Cross Road
Location: SR 369 (Browns Bridge Rd)
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

Fall 2007

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 400 (Forsyth/Dawson & Lumpkin Counties) - Evening

J
Congestion Type: Signal Queue
Location: SR 369 (Browns Bridge Rd)
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2

K
Congestion Type: Congested Cross Road
Location: SR 369 (Browns Bridge Rd)
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1

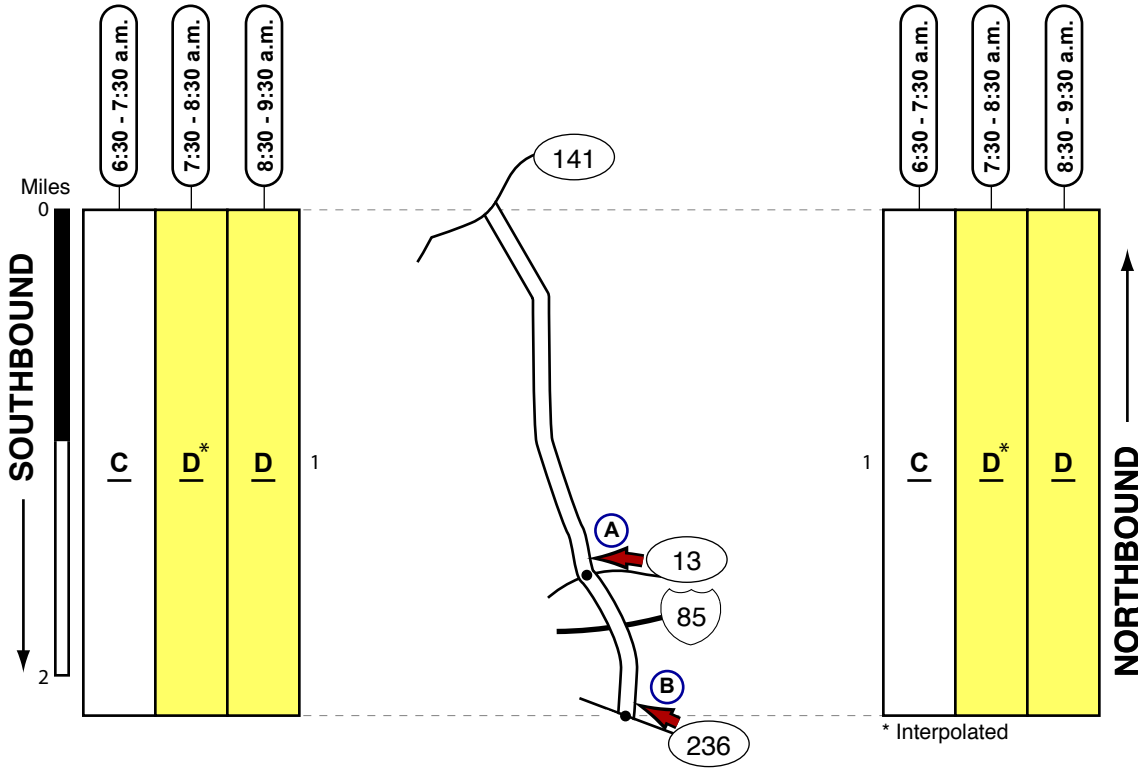
L
Congestion Type: Platoons
Location: Between Settingdown Rd and Cross Roads Rd
Frequency: Most observations
Direction: Northbound
Platoon Populations: 25 to 35 vpl
Number of Lanes: 2

M
Congestion Type: Signal Queue
Location: SR 318 (Dawson Forest Rd)
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

N
Congestion Type: Platoons
Location: Between SR 318 & Harmony Church Rd
Frequency: Intermittent
Direction: Northbound
Platoon Populations: 25 to 30 vpl
Number of Lanes: 2
Note: During some observations, the signals at SR 53 and Harmony Church Rd appeared to generate marginal congestion.

Spring 2008

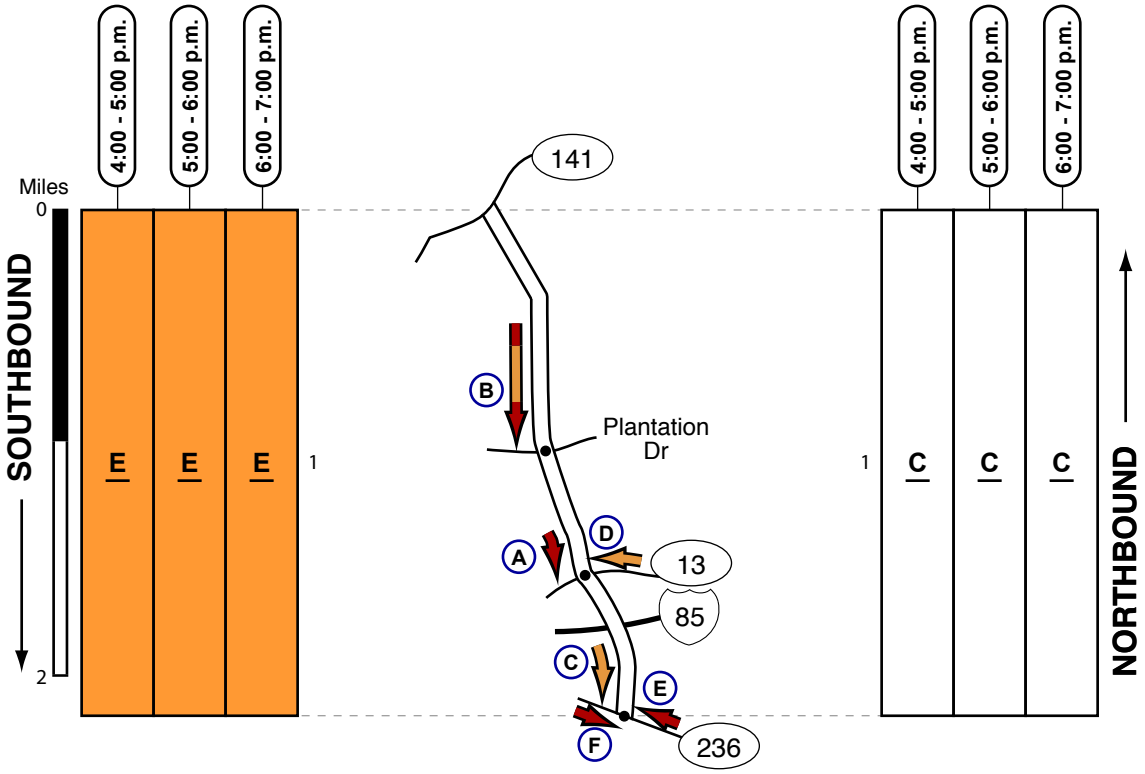
SR 884 - Lenox Road (Fulton County) - Morning



A
Congestion Type: Cross Road Signal Queue
Location: SR 13
Frequency: Peak hour
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 3

B
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: Most observations between 7:30 and 9:00 a.m.
Direction: Westbound
Queue Population: 35 to 85 vpl
Number of Lanes: 1

SR 884 - Lenox Road (Fulton County) - Evening



A
Congestion Type: Mainline Signal Queue
Location: SR 13
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Congestion in the two thru-lanes at the signal often extended back into the one-lane section of SR 884.

B
Congestion Type: Mainline Signal Queue
Location: Plantation Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: SR 236
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

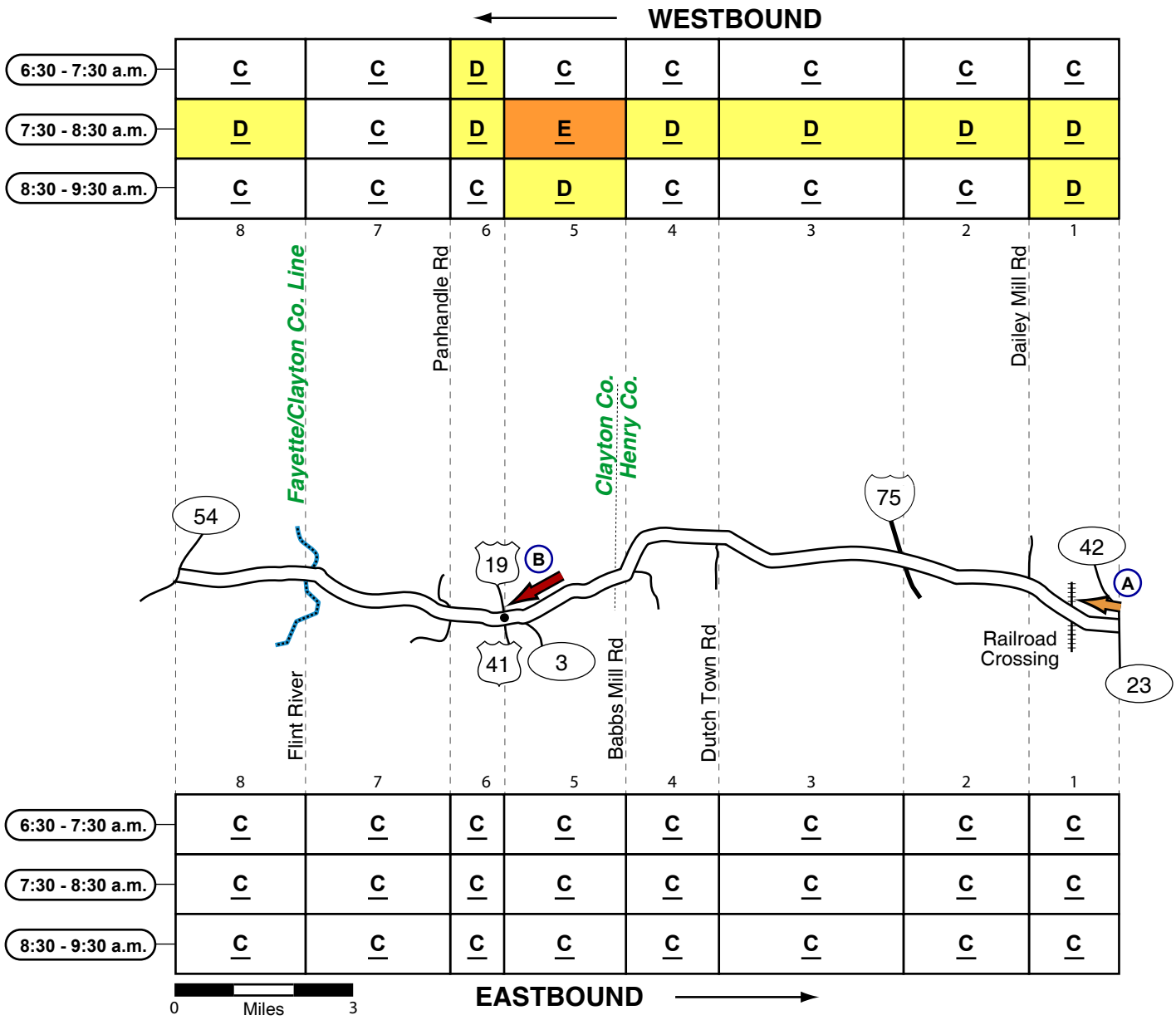
D
Congestion Type: Cross Road Signal Queue
Location: SR 13
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 3

E
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: Most observations after 5:30 p.m.
Direction: Westbound
Queue Population: 30 to 60 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: SR 236
Frequency: Most observations
Direction: Eastbound
Queue Population: 20 to 80 vpl
Number of Lanes: 1

Spring 2008

SR 920 (Fayette/Clayton & Henry Counties) - Morning

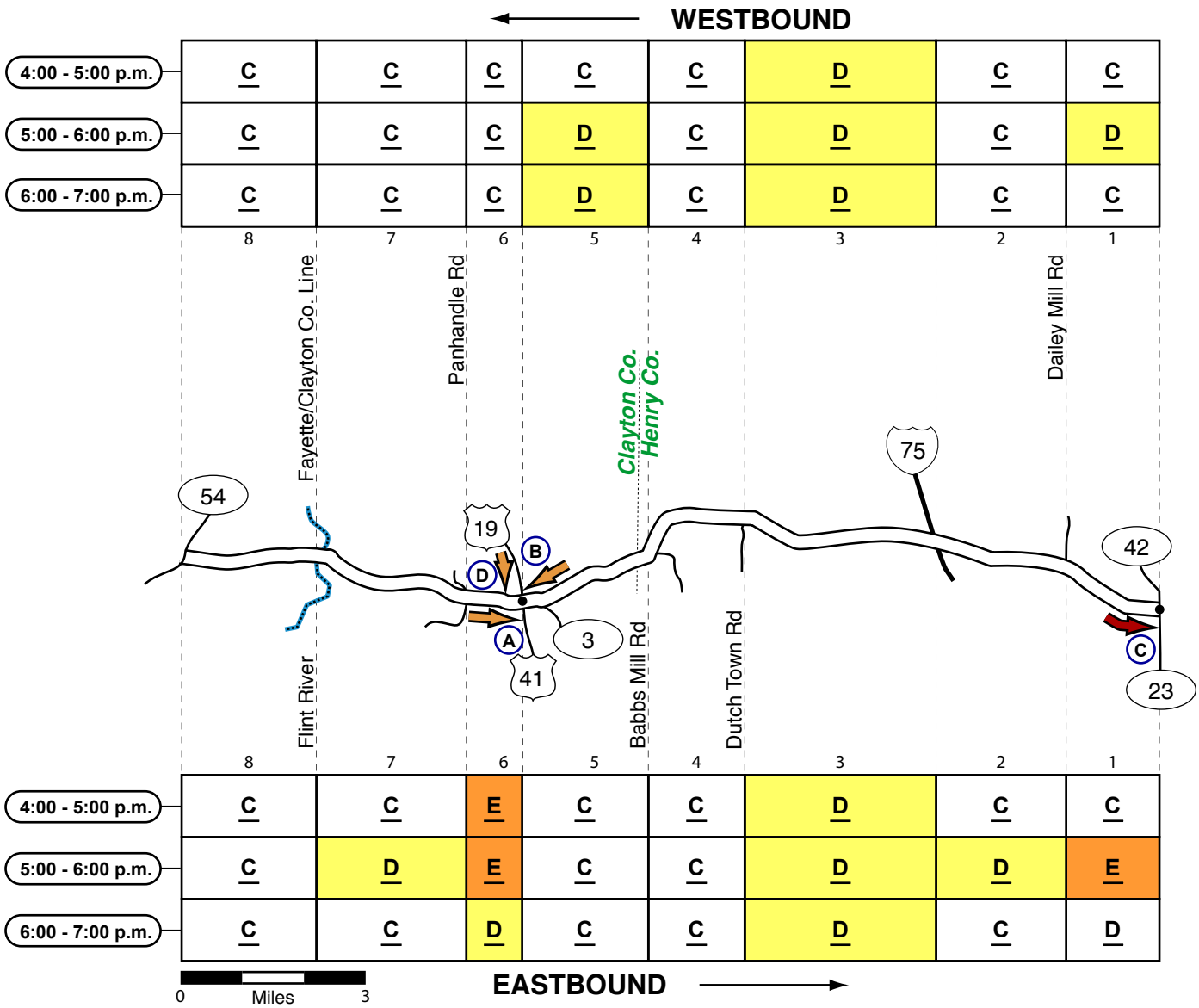


A
Congestion Type: Mainline Signal Queue
Location: Railroad Crossing west of SR 42
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 920 (Fayette/Clayton & Henry Counties) - Evening



A
Congestion Type: Mainline Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 25 vpl
Number of Lanes: 1

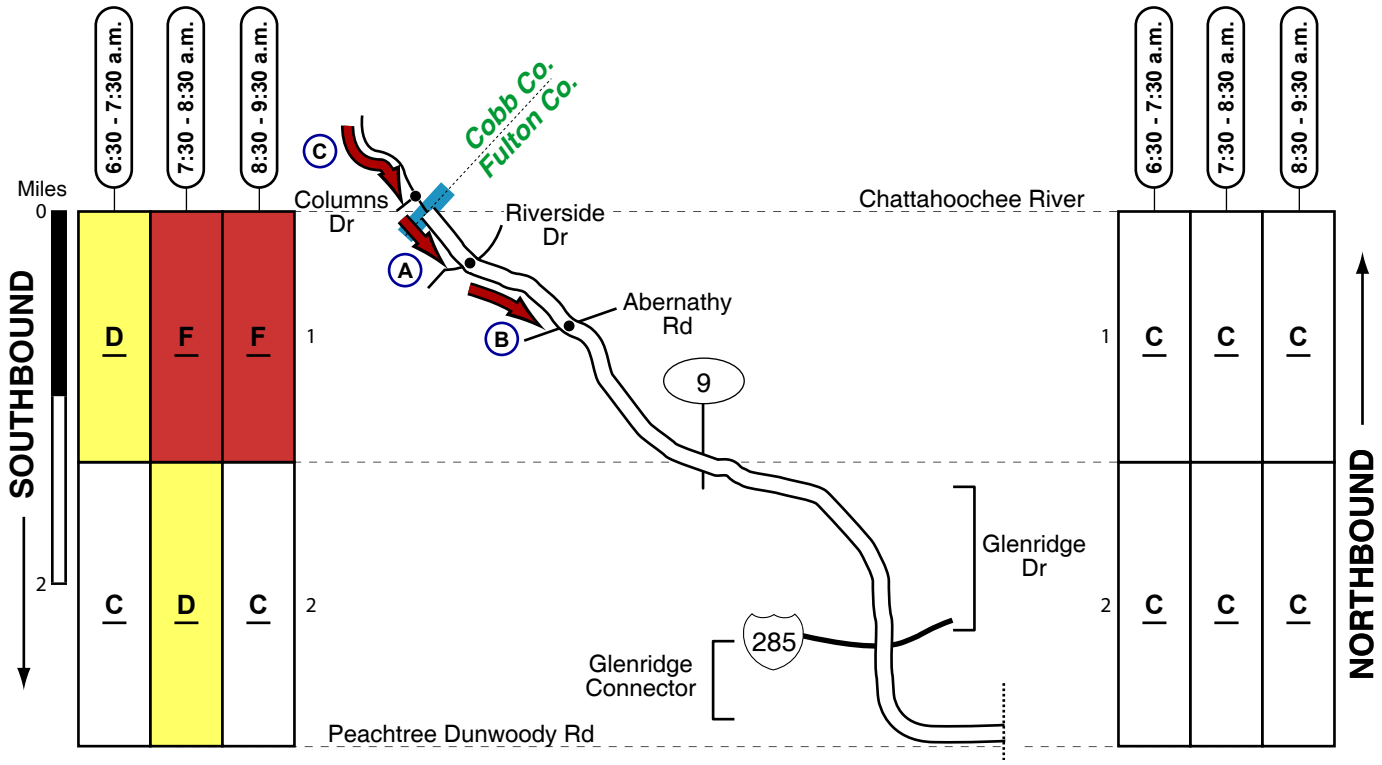
C
Congestion Type: Mainline Signal Queue
Location: SR 42
Frequency: Peak hour
Direction: Eastbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

D
Congestion Type: Cross Road Signal Queue
Location: US 19/41
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 50 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

(Blank)

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Morning



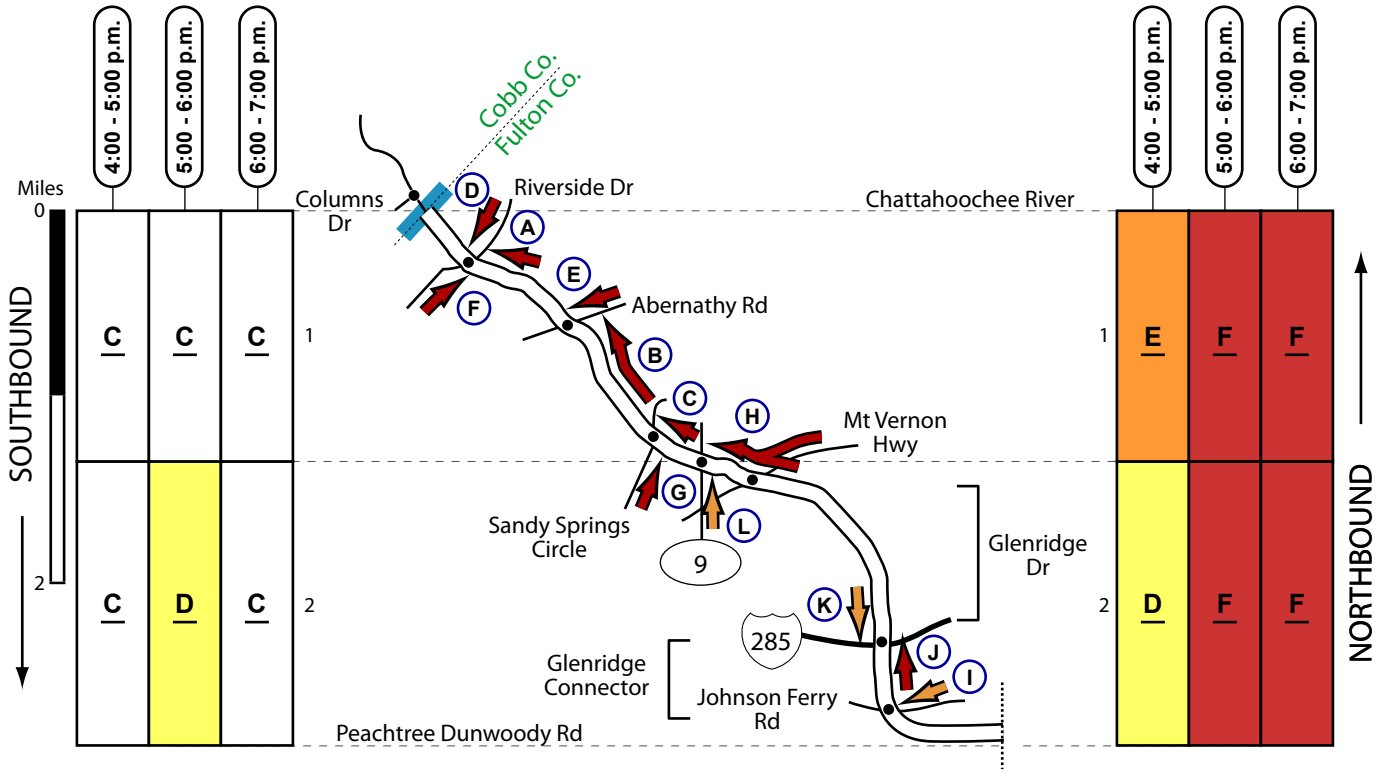
A
Congestion Type: Mainline Signal Queue
Location: Riverside Dr
Frequency: Most observations
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2
Note: Intermittently, southbound congestion approaching Riverside Dr appeared to back through the upstream signal at Columns Dr.

B
Congestion Type: Mainline Signal Queue
Location: Abernathy Rd
Frequency: Most observations
Direction: Southbound
Queue Population: 40 to 70 vpl
Number of Lanes: 2

C
Congestion Type: Mainline Signal Queue
Location: Columns Dr
Frequency: Peak Hour
Direction: Southbound
Number of Lanes: 2
Note: SR 947 in Cobb County was not in the survey area; however, southbound congestion was documented approaching the signal at Columns Dr. During several observations, extensive southbound congestion was found approaching Columns Dr and the Chattahoochee River.

Spring 2008

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 947- Johnson Ferry Rd/Glenridge Connector (Cobb & Fulton Counties) - Evening

A
Congestion Type: Mainline Signal Queue
Location: Riverside Dr
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 60 vpl
Number of Lanes: 2
Note: During one observation, northbound congestion approaching Riverside Rd extended back to Abernathy Rd (a distance of approximately one mile).

B
Congestion Type: Mainline Signal Queue
Location: Abernathy Rd
Frequency: Most observations
Direction: Northbound
Queue Population: 25 to 65 vpl
Number of Lanes: 1
Note: During several observations (on different days), northbound congestion approaching Abernathy Rd extended back to Sandy Springs Rd (a distance of approximately one mile).

C
Congestion Type: Mainline Signal Queue
Location: Sandy Springs Rd
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: In some cases, throughput at the signal at Sandy Springs Rd may have been adversely affected by downstream congestion.

D
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Abernathy Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1
Note: When congested, vehicles queued on Abernathy Rd at SR 947 extended back through the upstream signal at Brandon Mill Rd.

F
Congestion Type: Cross Road Signal Queue
Location: Riverside Dr
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1

G
Congestion Type: Cross Road Signal Queue
Location: Sandy Springs Circle
Frequency: Peak Hour
Direction: Northbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1
Note: The head of the queue was found in the left-turn bay; congestion typically extended back into the left lane on Sandy Springs Rd.

H
Congestion Type: Mainline Signal Queue
Location: SR 9 & Mt Vernon Hwy
Frequency: Most observations after 5:00 p.m.
Direction: Northbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: Northbound congestion approaching the signal at SR 9 typically extended back through the signal at Mt Vernon Hwy; large queue populations (30-50 vehicles) were typically found on Mt Vernon Hwy approaching the signal at SR 947.

I
Congestion Type: Cross Road Signal Queue
Location: Johnson Ferry Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 50 vpl
Number of Lanes: 2
Note: In some cases, congestion on Johnson Ferry Rd approaching the signal at Glenridge Connector extended back through the upstream signal at Glenridge Point Pkwy.

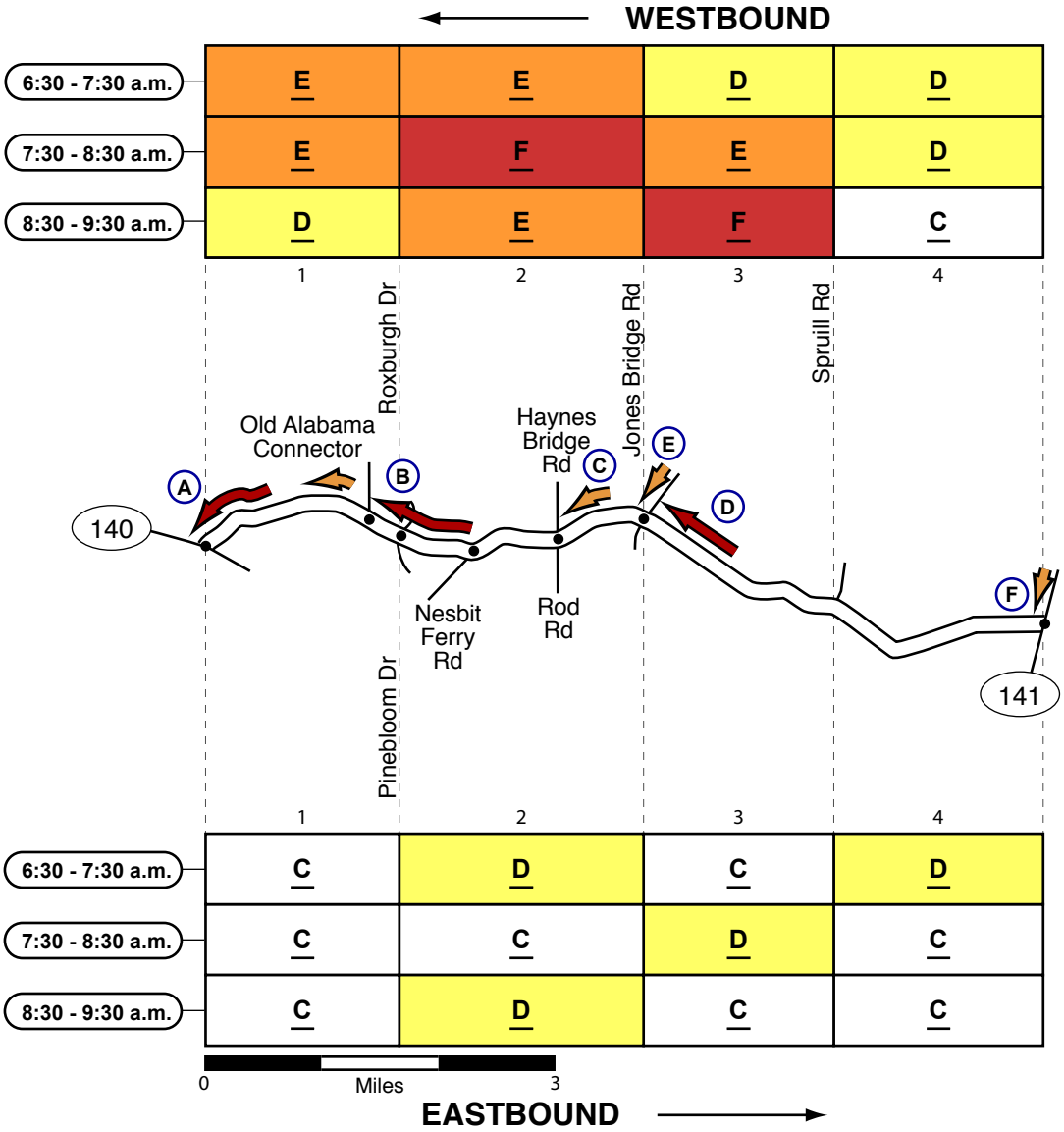
J
Congestion Type: Left-Turn Queue
Location: I-285
Frequency: Most observations
Direction: Northbound
Queue Population: 20 to 45 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the dedicated left-turn lane waiting to turn onto the I-285 westbound entrance ramp.

K
Congestion Type: Right-Turn Queue
Location: I-285
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: When congested, vehicles were queued in the right lane on Glenridge Connector approaching the signal at the I-285 westbound entrance ramp.

L
Congestion Type: Cross Road Signal Queue
Location: SR 9
Frequency: Intermittent
Direction: Northbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

Spring 2008

SR 961 - Old Alabama Road (Fulton County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 961 - Old Alabama Road (Fulton County) - Morning

A
Congestion Type: Mainline Signal Queue
Location: SR 140
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1
Note: The head of the queue on Old Alabama Rd was found in the dedicated right-turn lane (onto westbound SR 140). During one observation only, a mostly continuous zone of westbound congestion was found on Old Alabama Rd between SR 140 and Nesbit Ferry Rd (a distance of approximately 2.5 miles).

B
Congestion Type: Mainline Signal Queue
Location: Old Alabama Connector & Roxburgh Dr
Frequency: Most observations
Direction: Westbound
Queue Population: 30 to 80 vpl
Number of Lanes: 1

C
Congestion Type: Mainline Signal Queue
Location: Haynes Bridge Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

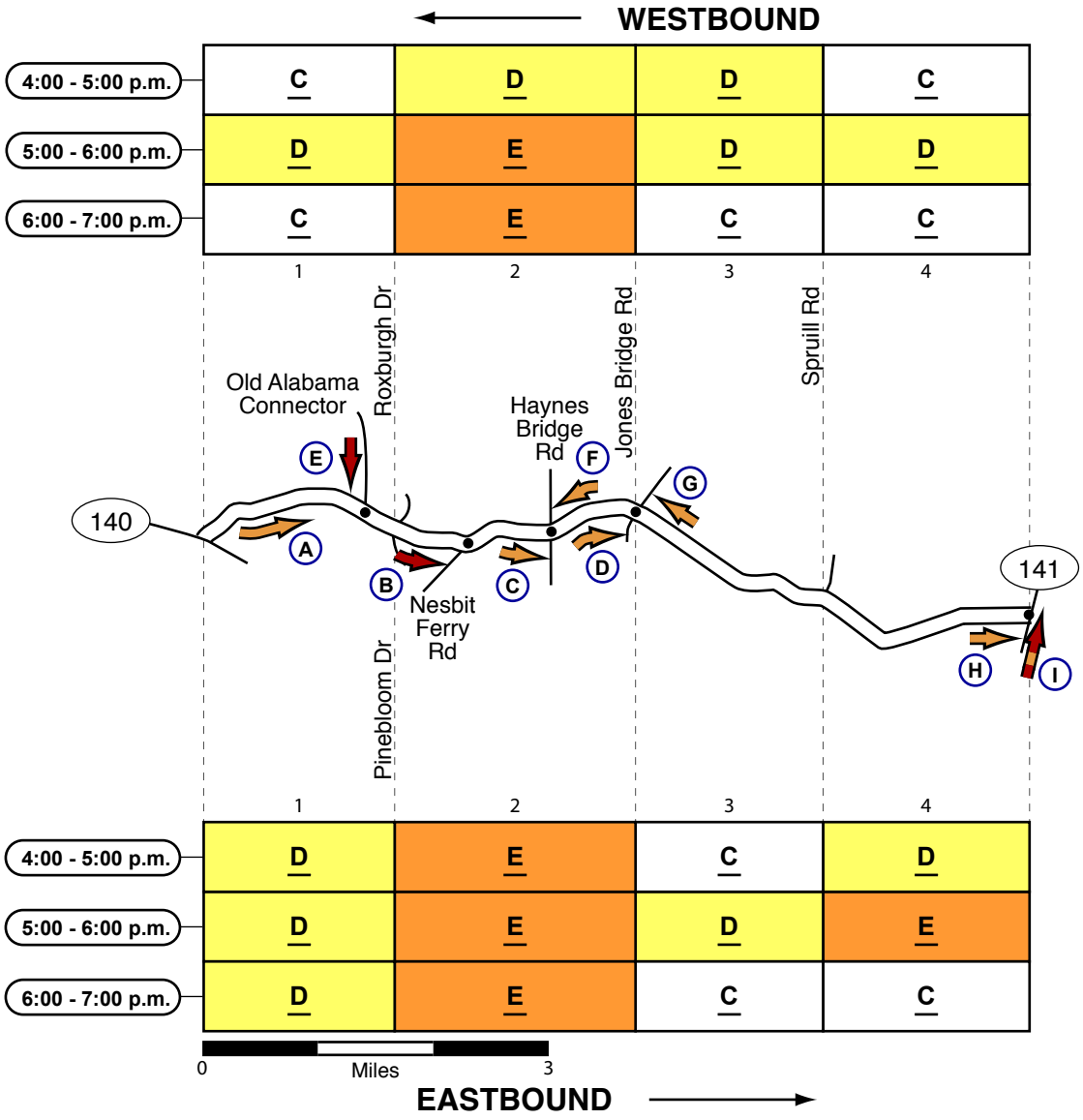
D
Congestion Type: Mainline Signal Queue
Location: Jones Bridge Rd
Frequency: Peak Hour
Direction: Westbound
Queue Population: 20 to 70 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Southbound
Queue Population: 20 to 60 vpl
Number of Lanes: 1

F
Congestion Type: Cross Road Signal Queue
Location: SR 141
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
(per 2007 data/analysis)

Spring 2008

SR 961 - Old Alabama Road (Fulton County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

SR 961 - Old Alabama Road (Fulton County) - Evening

A
Congestion Type: Platoons
Location: Between SR 140 & Roxburgh Rd
Frequency: Intermittent
Direction: Eastbound
Platoon Population: 25 to 35 vpl
Number of Lanes: 1

B
Congestion Type: Mainline Signal Queue
Location: Nesbit Ferry Rd
Frequency: Peak Hour
Direction: Eastbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1
Note: When congested, the head of the queue was found in the dedicated left-turn lane (to eastbound Old Alabama Rd).

C
Congestion Type: Mainline Signal Queue
Location: Haynes Bridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

D
Congestion Type: Mainline Signal Queue
Location: Jones Bridge Rd
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 1

E
Congestion Type: Cross Road Signal Queue
Location: Old Alabama Connector
Frequency: Peak Hour
Direction: Southbound
Queue Population: 20 to 50 vpl
Number of Lanes: 1

F
Congestion Type: Mainline Signal Queue
Location: Haynes Bridge Rd
Frequency: Intermittent
Direction: Westbound
Queue Population: 20 to 40 vpl
Number of Lanes: 1

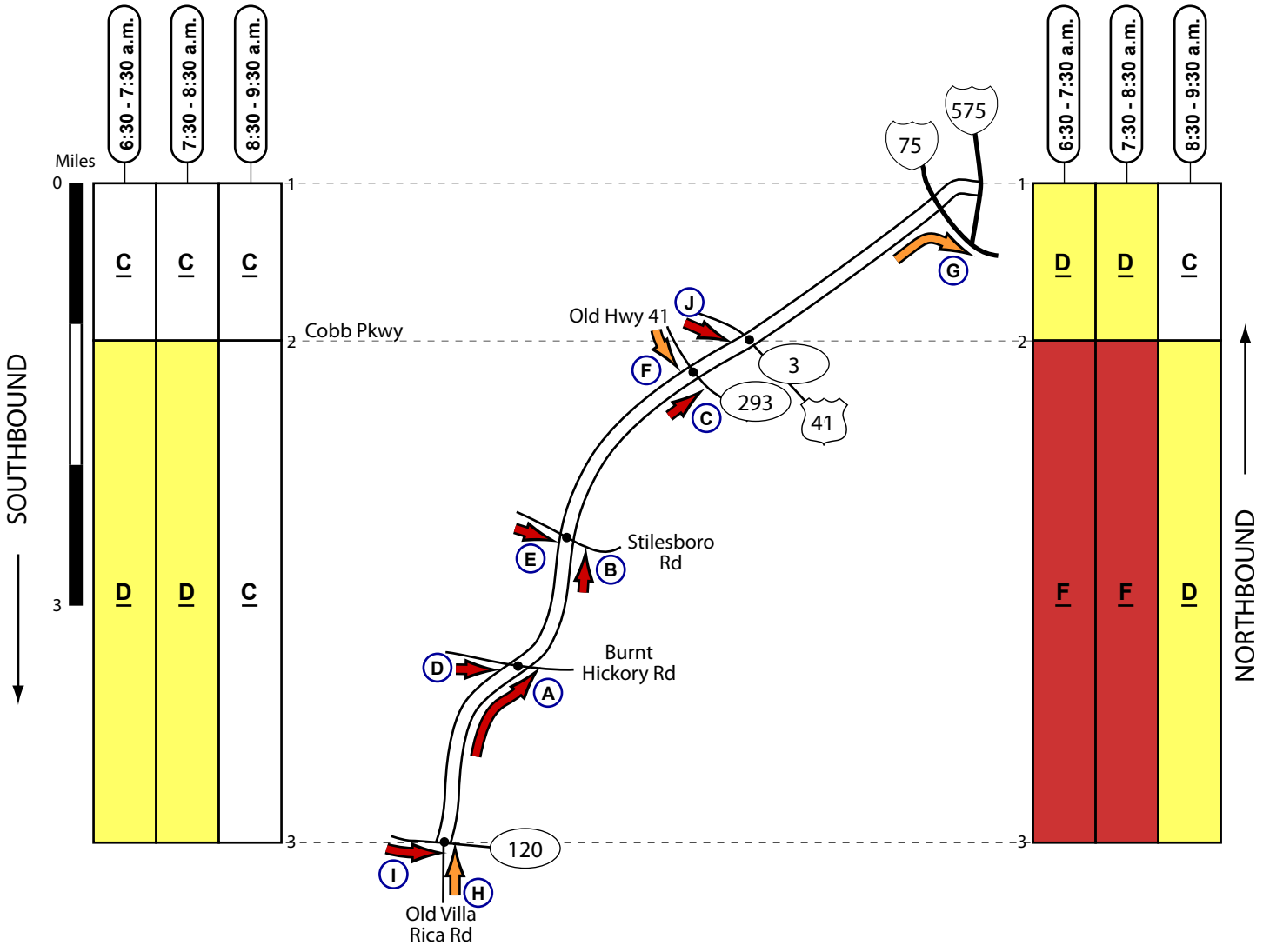
G
Congestion Type: Mainline Signal Queue
Location: Jones Bridge Rd
Frequency: One Time
Direction: Westbound
Queue Population: 30 to 35 vpl
Number of Lanes: 1
Note: During the 2004 survey, extensive westbound congestion was found on old Alabama Rd approaching the signal at Jones Bridge Rd; during the 2008 survey, westbound congestion was found one time only (approximately 35 vehicles were queued at the signal).

H
Congestion Type: Left-Turn Queue
Location: SR 141
Frequency: Intermittent
Direction: Eastbound
Queue Population: 20 to 30 vpl
Number of Lanes: 2

I
Congestion Type: Cross Road Signal Queue
Location: SR 141
Frequency: Most observations
Direction: Northbound
Queue Populations: 40 to 150 vpl
Number of Lanes: 2
Note: During the peak period, congestion typically extended back across the Chattahoochee River; on two of the mornings surveyed, congestion extended all the way back to Jones Bridge Rd (a distance of approximately 2 miles).
(per 2007 data/analysis)

Fall 2007

Barrett Parkway/Ridgeway Road (Cobb County) - Morning



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Barrett Parkway/Ridgeway Road (Cobb County) - Morning

A
Congestion Type: Signal Queue
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 35 to 115 vpl
Number of Lanes: 2
Note: During the peak period, queue populations at the signal typically exceeded 100 vehicles per lane (two lanes).

B
Congestion Type: Signal Queue
Location: Stilesboro Rd
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

C
Congestion Type: Signal Queue
Location: Old Hwy 41 (SR 293)
Frequency: Most observations
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 2

D
Congestion Type: Congested Cross Road
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

E
Congestion Type: Congested Cross Road
Location: Stilesboro Rd
Frequency: Most observations
Direction: Eastbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 1

F
Congestion Type: Congested Cross Road
Location: Old Hwy 41 (SR 293)
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

G
Congestion Type: Entrance Ramp Queue
Location: I-75
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 70 vpl
Number of Lanes: 1
Note: In some cases, congestion on the entrance ramp at I-75 backed into the right lane on Barrett Pkwy; congestion was also found intermittently at the upstream signal at Cobb Place Blvd (right lane only).

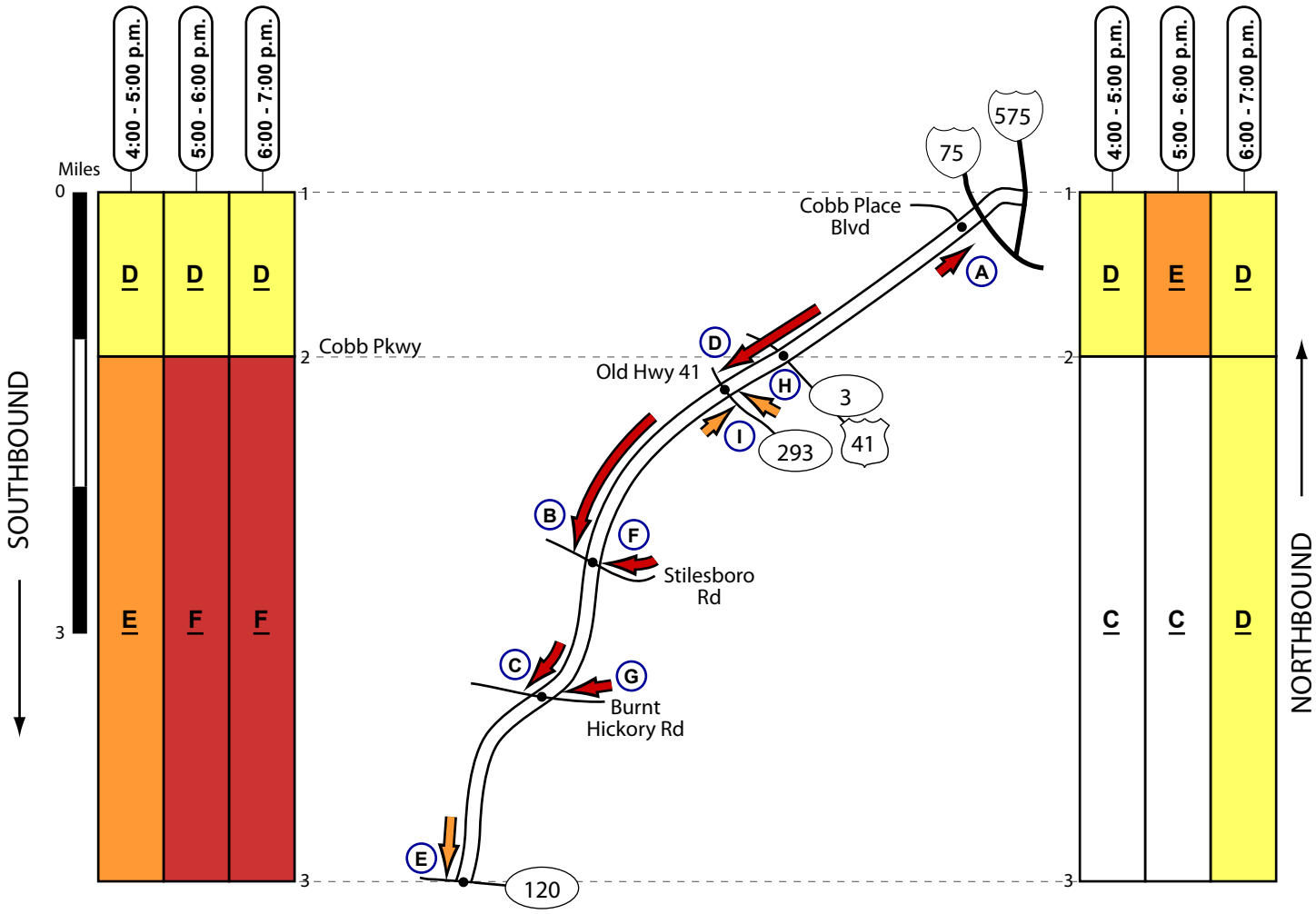
H
Congestion Type: Congested Cross Road
Location: Old Villa Rica Rd
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 2

I
Congestion Type: Congested Cross Road
Location: SR 120
Frequency: Intermittent
Direction: Eastbound
Queue Populations: 20 to 60 vpl
Number of Lanes: 2

J
Congestion Type: Congested Cross Road
Location: SR 3/US 41
Frequency: Most observations before 8:00 a.m.
Direction: Southbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 2

Fall 2007

Barrett Parkway/Ridgeway Road (Cobb County) - Evening



Arterial LOS Legend	A	B	C	D	E	F
	Very Light	Light	Moderate	Heavy	Congested	Severe

Barrett Parkway/Ridgeway Road (Cobb County) - Evening

A
Congestion Type: Signal Queue
Location: Cobb Place Blvd
Frequency: Peak Hour
Direction: Northbound
Queue Populations: 20 to 35 vpl
Number of Lanes: 3

B
Congestion Type: Signal Queue
Location: Stilesboro Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 40 to 130 vpl
Number of Lanes: 2

C
Congestion Type: Signal Queue
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Southbound
Queue Populations: 30 to 45 vpl
Number of Lanes: 2

D
Congestion Type: Signal Queue
Location: Old Hwy 41 (SR 293)
Frequency: Most observations
Direction: Southbound
Queue Populations: 25 to 90 vpl
Number of Lanes: 2

E
Congestion Type: Signal Queue
Location: SR 120 (Dallas Hwy)
Frequency: Intermittent
Direction: Southbound
Queue Populations: 20 to 30 vpl
Number of Lanes: 2
Note: In some cases, southbound congestion was found at the first signal north of SR 120 (commercial businesses).

F
Congestion Type: Congested Cross Road
Location: Stilesboro Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 80 vpl
Number of Lanes: 1

G
Congestion Type: Congested Cross Road
Location: Burnt Hickory Rd
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

H
Congestion Type: Congested Cross Road
Location: Old Hwy 41 (SR 293)
Frequency: Intermittent
Direction: Westbound
Queue Populations: 20 to 40 vpl
Number of Lanes: 1

I
Congestion Type: Signal Queue
Location: Old Hwy 41 (SR 293)
Frequency: Intermittent
Direction: Northbound
Queue Populations: 20 to 25 vpl
Number of Lanes: 1
Note: When congested, vehicles in the left-turn bay extended back into the left lane on Barrett Pkwy.

APPENDIX A, VOLUME TWO

PROCEDURE FOR DETERMINING PERFORMANCE RATINGS:

INTERRUPTED-FLOW ARTERIAL HIGHWAYS

Introduction

Overlapping aerial photography can document many useful characteristics of traffic flow on highway networks. The photographs can be invaluable for screening problem sites, winning support for ideas, and explaining decisions to others. If formal rules and procedures are applied to the analysis of aerial photographs, the photography can provide a cost-effective basis for periodically rating the performance of large highway systems on a link-by-link basis.

Background

On motorized vehicle highways, traffic flow is normally measured in terms of three basic parameters: *volume*, *speed*, and *density*. These parameters are related mathematically such that, if only two are known, the third can be calculated (volume equals speed times density). Other useful flow parameters related to speed are *travel time* and *delay* between specific points on a system.

The *Highway Capacity Manual (HCM),* updated in 2000 by the Transportation Research Board of the National Research Council, is an authoritative governmental resource that has established a simplified concept by which the performance of all types of transportation facilities can be described and compared. This concept is called *level of service,* or *LOS*. For each type of facility, a single traffic flow parameter – the one deemed most appropriate by the committee that publishes the manual – is chosen to be the basis for defining six rating categories. These categories are represented by the letters “A” through “F”, ranging from the most favorable rating of LOS A (indicating high service quality associated with lightly-used facilities) to the poorest rating of LOS F (indicating a facility burdened by congestion or other undesirable performance characteristics). This LOS system, introduced in 1965 version of the HCM and revised periodically since, has been widely adopted for evaluating existing highway systems and planning future improvements. Because six LOS classes are easier to understand than tables of numbers, LOS has been widely used in the political process. In some jurisdictions, LOS standards are even found in legislation attempting to guide facility planning or control real estate development.

Part One: Interrupted-flow highways (highways with traffic signals)

Summary

Density is not an appropriate performance measure for interrupted-flow arterials since density measurements will fluctuate widely with uneven flow caused by traffic signals. Accordingly, the defining parameter of HCM LOS on interrupted-flow highways is *average travel speed*, which is calculated from travel time. Travel time is commonly measured by inserting probe vehicles into a traffic stream (called "floating cars"), and recording travel times between key intersections; an alternative method is to record and match hundreds of license plate numbers at various points along a study corridor, and then calculate the associated travel times and speeds. These methods are widely used on commuter highways of all types, and have the advantage of providing actual HCM LOS on interrupted-flow highways – something that aerial photography cannot do on a large-scale basis.

Travel time methods are limited, however, in that they do not provide information regarding how heavily facilities are being used (that is normally accomplished with some form of volume determination). They also do not provide insight as to the underlying causes of congestion, or the degree to which congestion exists on cross streets or along merging routes. Aerial photography can provide this information, with the added benefit that the actual photographs can be used for inspection or documentation. For example, without traveling to the field, transportation specialists can view bottlenecks, look for causes, and sometimes even consider the feasibility of potential corrective actions. For example, is the problem caused by a specific turning movement within the intersection? Might it be feasible to add a turning lane? Are cross streets free of congestion (so we can consider adding "green" signal-time to the primary route)? How much worse has this become over the last three years? Should we include this site on our study list? The photographs then become supporting documentation for subsequent recommendations by engineers and funding decisions by elected officials.

Therefore, even though aerial photography cannot supply HCM LOS on interrupted-flow highways, the potential benefits of the approach are such that Skycomp was asked to develop a *surrogate* LOS performance measure – one that could be obtained cost-effectively from aerial photography, and could be used to monitor and document facility performance over time.

Surrogate LOS rating system developed by Skycomp.

Skycomp began by recognizing that the *HCM* supplies qualitative descriptions of the general nature of traffic flow associated with each LOS. For example, for LOS A, the *HCM* states:

> "LOS A describes primarily free-flow operations at average travel speeds, [usually about 90% of the free flow speed for the given street class]. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal." *(Travel-time definition highlighted in brackets.)*

At the other extreme, the *HCM* states:

> "LOS F is characterized by urban street flow at extremely low speeds, [typically one-third to one-fourth of the free-flow speed]. Intersection congestion is likely at critical signalized locations, with high delays, high volumes and extensive queuing."

Because aerial photographs show actual conditions on each highway link, they can be used to classify general levels of demand and congestion in a manner reasonably consistent with the six *HCM* descriptions. Skycomp developed and formalized such a system, which was introduced in 1995*. This rating system was developed under the following constraints:

- Like HCM LOS, the surrogate rating scale must consist of six classes labeled "A" through "F". These classes must cover the full range of traffic conditions found on interrupted-flow highways, from empty to densely congested highways, with reasonable gradations in between. Ratings must be generally consistent with the qualitative descriptions of traffic flow associated with each LOS class in the HCM.
- The procedure must produce consistent results, so that different trained persons will generally assign the same ratings when analyzing with the same photographs.
- The procedure must produce ratings that are not sensitive to the time the photographs were taken relative to the signal cycle.

Definition of Surrogate LOS Performance Ratings

Skycomp's system relies on assessing the nature of vehicle platoons and the extent of queuing found at signalized intersections. Accordingly, the six surrogate LOS performance ratings used in this survey of interrupted-flow highways are defined as follows. (Because they are surrogate LOS measures, they are underlined for differentiation from HCM LOS):

Surrogate LOS Performance Rating A:

— Very few vehicles are using the highway; the highway is virtually deserted. *[HCM qualitative description for LOS A: Vehicles are completely unimpeded in their ability to maneuver within the traffic stream; free-flow operations.]*

Surrogate LOS Performance Rating B:

— Traffic flow is light; there is little or no grouping of vehicles ("platooning"). *[HCM qualitative description for LOS B: reasonably unimpeded operations; ability to maneuver only slightly restricted.]*

Surrogate LOS Performance Rating C:

—Traffic flow is moderate (not heavy, not light). There are enough vehicles to form into distinct platoons, but platoon populations do not exceed 15 vehicles per lane. *[HCM qualitative description for LOS C: stable operations; some restrictions to ability to maneuver.)*

Surrogate LOS Performance Rating D:

—Traffic flow is heavy; there are many cars on the road. Significant queuing is found at signals, but all queued vehicles are expected to clear the signal on "green" (there are less than 20 vehicles per lane queued at all signals in the segment). Platoons contain at least 15 but do not exceed 25 vehicles per lane. *[HCM qualitative description for LOS D: borders on unstable flow where small increases in flow may cause substantial decreases in travel speed.]*

Surrogate LOS Performance Rating E:
— Traffic flow is congested. The segment may contain one or two signalized intersections with queues of more than 20 vehicles per lane (all vehicles may not clear on "green"). Platoon populations exceed 25 vehicles per lane. (On long one-lane segments, the movement of vehicles may resemble a funeral procession, with little opportunity for side-traffic to enter the roadway.) *[HCM qualitative description for LOS E: significant delays and low average travel speeds; typical causes include adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.]*

Surrogate LOS Performance Rating F:
— Traffic flow is severely congested. This involves vehicles backing through an upstream signal, or for the length of the segment; a series of closely-spaced intersections with more than 20 vehicles per lane queued at each; or the segment contains one severely congested intersection, with more than 40 vehicles per lane queued approaching the signal (it may take two or more signal cycles to clear the intersection). *[HCM qualitative description for LOS F: flow at extremely low speeds; high delays and extensive queuing likely at critical intersections.]*

These are the definitions that were used in evaluating the interrupted-flow highways for each of the surveys conducted in 2004 and 2008.

Photo analysis procedures

Prior to the beginning of photo analysis, each surveyed highway was segmented into sections between major intersections or crossroads (segments were normally two to three miles in length; however, some segments were as short as one mile or as long as five miles, depending primarily on the density of traffic signals).

Level-of-service ratings were assigned one segment at a time, by direction. For each segment, all associated photographs were laid out and oriented for simultaneous viewing. The analyst began by considering the segment a rating of surrogate LOS C; from the photographs, a determination was then made if the conditions warranted that rating. If so, the assignment of LOS C was made. If not, the analyst adjusted the rating upward or downward as warranted by the conditions.

In the event that an incident or temporary roadwork significantly affected the rating, the evaluator attached a code that would later exclude the affected data from being compared to the results of other survey flights.

After a quality-control review by the senior analyst, all individual ratings were digitized and entered into a computer database program for compilation and evaluation. Ratings were printed by time slice and by day, so that unusual ratings could be identified. For example, if "B" or "C" ratings were assigned on three days and an "F" rating on one day, the photography was checked for possible error or incident. If the data were clearly atypical but a cause could not be identified, a code "u" ("unknown") was attached to the data (like the incident and roadwork codes, this would flag the data for exclusion when determining predominant ratings).

Skycomp's senior analyst then reviewed the photography at each bottleneck location (performance rating "E" or "F"), verified the traffic quality ratings assigned by the analyst, and prepared a text entry summarizing details at the site. For example:

Summary detail note (US 78 - Morning):
Congestion Type: Signal Queue
Intersection: Wisteria Dr
Frequency: Most observations
Direction: Westbound
Queue Populations: 20 to 100 vehicles per lane
Number of Lanes: One

For each bottleneck, photographs were also selected that best illustrated the congestion that was found. Digital versions of these photos were then labeled as appropriate, and set aside for incorporation later into the interactive digital slide show.

Next, revisions were made to the database as appropriate; average LOS ratings were then generated for inclusion in the performance rating tables in Part One.

* (Skycomp developed its system to the HCM LOS descriptions that were current in 1995. The qualitative descriptions associated with each LOS rating were not materially revised in HCM 2000.)